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COMPARATIVE STUDY OF ENGLISH AND AMERICAN SECONDARY EDUCATION

The plans which have been made by Professors E. D. Grizzell and Arthur J. Jones, of the University of Pennsylvania, for a comparative study of British and American secondary schools are outlined in detail by Professor Jones as follows:

I. Purpose

1. To promote a better understanding and a more sympathetic relationship between English and American educators
2. To provide a medium for the study of common problems in order that a knowledge of the best theory and practice in either system of secondary education may be made available to the teachers and administrators in the other system
3. This study has been undertaken with the conviction that there is a real need for a better understanding of educational problems and procedures in the two countries. In this country our resources are taxed to the utmost to provide for the ever increasing numbers attending our secondary schools and colleges. We are trying to find a way to overcome the dangers of mass education and especially to find a method by which we can better meet the needs of the superior students. In England the highly selective system of secondary and higher education is acknowledged to be inadequate to meet the educational needs of the country. English educators are trying to find a way by which increasing numbers can be ac-

commodated and by which those of lower ability may be helped. Approaching the educational problem from the opposite point of view, we are certain that each country can profit much from the experience of the other. This is amply borne out by the great interest in the project both in the United States and in England.

II. Scope of the study

1. General

- a) Comparison of the main facts and tendencies in the recent development of secondary education in England and in America
- b) Topics for comparative study
 - (1) Meaning and scope (including aims) of secondary education
 - (2) The secondary-school population
 - (3) The secondary-school curriculum (This includes a consideration of all the educational influences of the school.)
 - (4) Personnel of the secondary-school staff
 - (5) Material of secondary schools (buildings, grounds, equipment, supplies, etc.)
 - (6) Administration of secondary education
 - (7) General tendencies revealed in the development over the period 1900-1926

2. Detailed comparative study of a limited number of schools in each country

- a) Secondary schools being selected (thirty or more schools in England and thirty schools in America of all types)
- b) General topics suggested for study (The topics for investigation will be determined after the appointment of joint committees.)
 - (1) Students in the schools
 - (2) The curriculum (including studies and activities) and daily programs
 - (3) Methods of classroom procedure and discipline
 - (4) Textbooks, laboratory equipment, supplies, etc.
 - (5) Results in comparable subjects
 - (6) Teachers—selection, training, salary, etc.
 - (7) Supervision or other methods of improving instruction
 - (8) Systems of tests and examinations; methods of marking
 - (9) General administrative features
 - (10) School costs and sources of revenue

III. Method of organizing for the conduct of the study

1. In general charge: Division of Secondary Education of the University of Pennsylvania, Philadelphia, Pennsylvania. Organization of the study, collection of material, editing of results, general correspondence, and publicity
2. Committees: Two committees to be appointed, one in England and one

in America, to act in an advisory capacity in planning and conducting the study and to have immediate charge of certain phases of the work in each country

3. Professor E. D. Grizzell, of the Division of Secondary Education of the University of Pennsylvania, is in residence in England during the year 1928-29 and is organizing the study of the English schools.
4. Professor Arthur J. Jones and Professor Grizzell will have general direction of the study in American schools.
5. Utilization of, and co-operation with, various agencies now interested in phases of the study

IV. General procedures in the study

1. Collection and organization of available printed material bearing on the study
 - a) Selected, annotated bibliography of the best books and pamphlets, magazine articles, etc.
 - b) Critical statement of comparative aspects of English and American secondary education since 1900
2. Detailed study of selected schools
 - a) Collection of available statistical and descriptive material, reports, etc., bearing on, or related to, the study
 - b) Organization of tests for comparative results
 - (1) Tests to be used
 - (a) Standardized tests so far as possible
 - (b) Regular class or school examinations exchanged
 - (c) Matriculation (college-entrance) examinations
 - (d) Mental (intelligence) tests when possible
 - (2) Method of giving and scoring tests
 - (a) Standardized tests to be given and marked only by qualified experts
 - (b) Regular class examinations to be exchanged; English students to take American examinations and American students to take English examinations; papers to be graded by English teachers and American teachers independently; results to be compared and comments exchanged
 - (c) Comparison of questions and results of examinations of Joint Matriculation Board in England with those of the College Entrance Examination Board in America
 - c) Securing of first-hand information regarding classroom procedures, standards of work, and conduct of schools
 - (1) Opinions and observations of visitors qualified to report on specific points
 - (a) Visitors to the United States
 - (b) Visitors to England
 - (2) Opinions of leaders in education in both countries

- (3) Exchange of teachers
 - (a) Utilization of existing agencies
 - (b) Development of new plans for exchange
- (4) Exchange of students

ARGUMENTS IN FAVOR OF JUNIOR COLLEGES

One of the members of the Board of Regents of the University of Utah, D. H. Christensen, has become fully convinced that the organization of junior colleges is essential to the success of the University of Utah and to the solution of the general educational problems of Utah. In a vigorous address delivered before the Salt Lake City Chamber of Commerce, he marshaled the arguments in favor of junior colleges. Some extracts from this address are as follows:

With due allowance for the heavier population in the centers where the state institutions are located, it is still quite evident that their major service does not extend over a wide geographical area and that, therefore, more than one-half of the counties in the state are without adequate state educational facilities above the high school. While it is true that qualified students in these less-favored sections may attend state-supported higher institutions of learning, the fact remains that they do not, and that is the pertinent fact. Many students, of course, of which we have no record here, attend private schools of college grade, perhaps because these schools are more accessible, expenses are lighter, and the social environment may be preferable. There are likely other reasons, none of which would be regarded if the necessity of leaving home were not the first consideration. . . .

A few years ago several causes combined to produce a heavy increase in enrolment and regularity in the lower grades. This wave moved forward successively from year to year, swelling the number in the upper grades. Then another condition arose, namely, an appreciable lowering of the average age of pupils, especially in the grades above the sixth. Increased efficiency in teaching helped to bring about this change, but the chief contributing factors were the greater regularity of attendance and the increase in the length of the school year in response to a popular demand that found expression in legislative enactments, which dealt chiefly with compulsory attendance and increased financial aid.

School people and patrons recognized that in the upper grammar grades individual aptitudes begin to assert themselves and that this condition must be met with some diversification of the curriculums. The junior high school which evolved as a part of the school system of Salt Lake City more than two decades ago came as a carefully matured plan to meet this new viewpoint. At present the junior high school and the senior high school as distinct units, maintained together or separately, are quite general throughout the United States, covering

three or two years according to the nature and plan of the main school organization.

Several years after the establishment of these new units in the school organization, the onward moving army of students reached the college, and Freshman and Sophomore classes were so increased in number that buildings at the University were inadequate to meet the needs.

Hence, the same problem has arisen at the University that confronted the public schools some years ago, and it is probable that the solution must be reached in much the same way.

Owing to the same causes, college Freshmen are much more numerous than they were a few years ago, and their average age is reduced. It is possible, because of the rapid movement through the lower grades, that there has not been as complete assimilation of acquired knowledge nor so orderly and thorough a mental development. Entrants are younger and less mature in experience; consequently, they find greater difficulty in meeting the new conditions with which they are confronted in college life. The heavy percentage of failures among Freshmen attests this fact. The junior college in the rural district would overcome these defects in large measure. In the onward movement the individual would have more consideration and the mass less. . . .

The average high-school graduate is a misfit in the traditional college of today because the college cannot adjust itself, or, at any rate, does not adjust itself, to his needs. Witness the "weeding-out" process in Freshman classes of our colleges! Average high-school graduates are not wanted in the larger colleges of the country. At least, not many are wanted. Few, if any, of the big schools extend a beckoning hand. Some state universities keep only a limited number, and these after a "sifting" process, sometimes, I fear, arbitrarily administered.

The Freshman enters an environment wholly different from anything he has experienced. He is a stranger in a strange land—new classmates, new classrooms, new teachers, new subjects, new methods, and perchance new aspirations. He needs advice. He needs encouragement. He needs sympathy. He needs the magnetic touch of personality. Under the conditions that necessarily obtain, these are the things most difficult to give or to get. In his Freshman year the college student craves and needs more help and more consideration than at any later time. But he must suffer disappointment, for circumstances forbid. A new link must be forged to join the upper and lower ends of the chain. The junior college is that link. It is coming. It is here. . . .

The junior college would be a real and substantial asset to our rural communities.

An institution of higher learning is an asset to any community. Relatively speaking, however, it means less in a large city than in a small one. In a town or small city it is the center from which all important social and educational activities radiate. In business and industrial activities it becomes a factor of no small importance. An increase of several hundred thousand dollars in circula-

tion in any small community gives added impetus to all business. Local pride is stimulated, and the general tone in community affairs is brought to a higher level. Then, too, the presence of such an institution would bring to a community an increase of a desirable class in the population, and many of the substantial citizens who otherwise would move away would prefer to avail themselves of educational opportunities in or near the home town. Notable examples are Provo and Logan. The presence of the Branch Agricultural College in Cedar City has been a factor of no mean importance in promoting the growth of that thriving city.

Of course, it must be admitted that in the final outcome the establishment and maintenance of this new unit would add to the cost of public education in our state, but the increased number of students who would receive more and better training would be an incomparable gain not only in increased earning power of the individual but in an even better and finer citizenship. It is worth the cost.

TUITION DETERMINED BY SCHOLARSHIP

The following editorial was published in the *New York Times*.

President Davis, of Stevens Institute, has made a novel proposal with regard to tuition fees. The average American college student pays only a fraction of the cost of his tuition, the rest being met by income from endowments and by the contributions of trustees and loyal friends. These gifts may be considered as investments in the students—good and indifferent, rich and poor alike. These are often supplemented by special scholarships which are available for those who would not be able otherwise to secure a college training and may be looked upon as additional investments—made usually on the basis of exceptional promise.

What President Davis proposes is that the entire amount supplied by the benefactors of the institution shall be looked upon as a sum to be invested in students, but on a sliding scale. Merit in scholarship and other "attributes of usefulness and success" will secure a larger individual participation in the endowment of the institution than the student of low scholarship and without such attributes can expect to have. The sliding scale would be applied through a remission of tuition fees commensurate with the scholastic standing and extra-curriculum activities of the student. The student of low scholarship would have to pay the full amount of the fees (which President Davis would have increased to an amount that would avert deficits). The benefactors would have the satisfaction of getting a larger return from their investment because it would go more largely to students of unusual ability and character. The students would "earn while they learn" and, if of limited means, would not have to tend furnaces, run laundry routes, or do other such things in order to stay in college. Even if well to do, they could "earn their way by scholarship and character just as if they didn't have money."

The plan has great appeal because it approaches the principle of paying for

what one gets and of getting what one pays for. Its success would depend upon the faculty's ability to appraise "promise" in students and upon the students' keeping themselves free of "professionalism" in seeking a scholarship excellence to which a monetary value attaches. It is certainly a plan worth trying.

Some device should be invented by an ingenious administrator of secondary education to make the opportunities offered to high-school pupils proportionate to their seriousness of purpose and earnestness of endeavor. Educational opportunity should certainly be equally accessible to all, but its continuance should be dependent on proper use. One of the major defects in the higher education and secondary education of America is the fact that they are so free that they are often wasted.

THE ALL-HI-COUNCIL OF CLEVELAND

An attractive pamphlet entitled *Student Government in Greater Cleveland* has been issued by the central pupil council of the high schools in Cleveland. The pamphlet describes the forms of student government in operation in the different schools and illustrates typical activities of the various student governments.

One page of the pamphlet is devoted to a description of the central council. From this page the following quotation is taken.

Student-council organizations in the schools of Greater Cleveland have united to establish the All-Hi-Council, which represents a successful attempt of student councils to get together on a co-operative basis. This council seeks to establish a more friendly relationship and to promote greater understanding and better co-operation between schools. It serves as a medium for the interchange of ideas so that each school may profit by the experiences of others.

For its project in the winter of 1928-29, the All-Hi-Council has gathered the material which was condensed and put into this booklet. A possible project for next term is the collecting of school handbooks from all over the country and the installation of a special student-council reference table at the Cleveland Public Library.

Each of the schools represented in the All-Hi-Council sends two or three delegates. These are regular members of the organization. Other interested students or teachers of various schools may attend any of the meetings.

An aim of the All-Hi-Council is to have in every Cleveland school some form of student government. In 1929 most of the junior high schools were supporting some modified form of student government.

Thus, the All-Hi-Council is destined to become a more influential organization, working for the benefit of the rapidly progressing group of young Americans who attend the schools of Greater Cleveland.

A SPECIAL CLASS FOR DULL PUPILS

Superintendent L. C. Ward, of Fort Wayne, Indiana, has reported as follows an experiment undertaken in that city:

In September, 1928, an experiment was begun in the Central High School, Fort Wayne, Indiana, involving nineteen pupils who, as judged by their previous school records, were doomed to failure in their high-school work. For several years such children have been forced into high school by the operation of compulsory-education laws and have failed in nearly all the subjects attempted. The experiment consisted in grouping together enough of these pupils to comprise a small section and placing one teacher in charge of all their academic work. The teacher is a young woman with thorough and broad preparation for high-school teaching and successful teaching experience in both elementary schools and high schools. The mental ratings of all the pupils were determined by means of the Binet test; their reading ages were established by the Thorndike-McCall Reading Scale; their chronological ages were, of course, known. The teacher made a careful study of each child's previous school record, personal traits and interests, home conditions, health habits, and such other qualities as might affect his school attitude.

All academic work was given on the usual IX B high-school level. The pupils used the same textbooks that the other IX B pupils used; in each case the teacher made such modifications in content as seemed necessary. Most of the children, however, did more work in the academic subjects than is required for the minimum course for IX B pupils. There is every reason to believe that their accomplishment was quite the equal of that of the lower third of regularly enrolled IX B pupils.

Despite the fact that most of the children had passed the age when the compulsory-education law could hold them in school and that children of this type usually leave school at the first opportunity, the entire group enrolled for the second semester, and nearly all the pupils expressed a desire to continue at least another year. Many of the group read books for the first time in their lives. Several pupils read five or six books, and two pupils read more than ten books. The pupils were encouraged to enter into the extra-curriculum life of the school. Several of the pupils maintained satisfactory membership in the band, glee club, student council, and other activities.

The entire group was enrolled in English, vocational information and guidance, commercial arithmetic, and physical education. The boys carried shop-work as a fourth subject; the girls, sewing.

MECHANICAL GROUPING AND ADAPTIVE GROUPING

A frequent result of the measuring of general intelligence is a purely mechanical grouping of pupils which does not contribute to efficient teaching. The *Denver Public Schools Bulletin* for February

contains the following discussion of various methods of grouping pupils, which deserves attention because it shows how grouping can be adjusted to different purposes in order to avoid the infelicities of purely mechanical classification.

Grouping within a class for instructional purposes has been used effectively for some time by many teachers. It is being employed more and more in progressive school systems in both elementary- and high-school classes. Such grouping may be in one of three ways or in a combination of them. They are as follows:

1. More or less permanent homogeneous groups formed on the basis of general ability. General ability may be determined by mental tests, a battery of subject-matter tests, previous records, teachers' judgment, or a composite of these.

2. More or less permanent heterogeneous groups each containing approximately the entire range of class abilities. Data from the above sources may be used just as effectively for this type of grouping.

3. Relatively temporary groups formed on the basis of achievement or needs within any particular field of subject matter. An objective or standardized test of the subject matter in question, teacher judgment, and past records are three main sources of data for such groupings. Pre-teaching tests promise to become of value here.

The use of one of the above methods does not exclude the use of the others, though the first and the second are not likely to be found together. A brief discussion of some of the advantages and limitations of each may prove suggestive to teachers.

Homogeneous ability groups.—The first plan is likely to be found in smaller schools attempting to follow an ability-grouping program. For example, if the school has only enough pupils for one VI B class, ability grouping can be accomplished only by having two or more groups within the class.

Such grouping brings together for instruction pupils fairly homogeneous in general ability. It simplifies the teacher's problem of preparation and presentation. It narrows the range of materials needed for any one group. It should assure a better response from pupils since presentation will more adequately fit the needs and understanding of each pupil within the group.

Some disadvantages that appear inherent within the plan are: difficulties of administration, at least where more than two groups are involved; lack of agreement between general ability and specific abilities; lack of agreement between general ability and rates of growth, interests, and emotional reactions; and the handicap to democratic, socialized training where ability groups are maintained in practically all school work.

Heterogeneous groups with pupil leaders.—The second plan has been experimented with especially in monitorial plans of administration and instruction. Groups of six to ten pupils are formed within the class, each contain-

ing bright, average, and dull pupils. A leader for each group is appointed or elected from among the better pupils. These leaders are active in socialized activities and in some of the details of classroom administration and often assist in the instruction of their groups. This type of instruction has been tried in handling very large classes using carefully worked-out unit assignment sheets. The results secured were at least equal to the results from small classes. Under such an organization individual differences must be cared for through skilfully differentiated assignments, special help, and stimulation.

A flexible plan of grouping.—The third plan of grouping may be used effectively for remedial work with either of the above plans, or it lends itself particularly well to classes where no other type of grouping within the class has been attempted. Its chief characteristic is its flexibility. It is organized to meet the immediate problems of instruction in each phase of subject matter. The pupil strong in arithmetic and retarded in reading is not forced to struggle with subject matter above his present level in reading nor to toy with simple problems in arithmetic. Under the first plan he might be placed in an "average" group which would fit his level in neither subject. Under the second plan difficulty might be experienced in giving the remedial assistance needed in reading. The third plan allows him to compete with the best in arithmetic but places him in a different reading group and provides opportunity for special analysis of his reading difficulties and special drills and motivation to assist him in overcoming his handicap.

For the child low in ability in all subjects this plan offers instruction at his level of difficulty in skills and knowledges and allows him, on the other hand, to participate with the entire class in many socialized situations where general participation is beneficial to all.

Teacher must meet pupil on present level of achievement.—This type of grouping necessitates careful inventory of pupil abilities at the beginning of each semester and systematic diagnosis of difficulties throughout the course. It is fundamentally opposed to the assumption that, because children are found in Grade VI B or X A at the opening of school in September, they are well prepared to do the work of that grade. It opposes the theory that the child is to blame if he is not equipped to do the work of his grade and must therefore take the consequences of unsatisfactory work and failure. It proposes that the teacher should determine in as scientific a manner as possible the general abilities and specific achievements of each of his pupils. It assumes that it is good economy to take time at the beginning of the semester to do this. It further proposes that the teacher's task is to take the child from where he actually is on the learning curve toward the place where he ought to be by the end of the term and to do this in the most efficient manner possible. It contends that one of the most effective aids in doing this is to group together within the class pupils of like powers or those in need of similar instructional materials or remedial aid; then, as handicaps are overcome, as latent power begins to manifest itself, continuously readjust the membership of these groups, not as a reward, not as a result of

competitive stimulation, but as a result of fitting the program to the child and encouraging him to do his best progressively for the sake of the satisfaction inherent in a job well done.

SCIENCE AND FREE ACTIVITIES OF PUPILS

The following statement appeared in a recent issue of the *Chicago Daily News*.

Chicago educators have become interested in an educational experiment which is to be undertaken at the Hill School at Pottstown, Pennsylvania. A new \$300,000 building, the gift of Mrs. Alexander Hamilton Rice, is being erected on the school grounds primarily to allow students to cultivate their hobbies.

Officially styled the Harry Elkins Weidner Memorial Science Building but already referred to among the students as "Hobby Hall," the new structure will accommodate the newest and best equipment for the study of the natural sciences.

This means that the boys will have every opportunity to learn by playing with the varied equipment to be placed in the building, which will include everything from steam engines to telescopes.

If the boy wants to fool with heavy machinery, he can turn himself loose in the basement among lathes and printing presses. If the whim takes him, he can slip up to the meteorological laboratory—or to the observatory—where he can manipulate a small telescope.

On the way, he will run into all sorts of fun—chances to dabble in photography, motion-picture experiments, radio, airplane work, and what not, or to browse around among scientific books, or to loiter in little museums where every exhibit from model engines to stuffed birds has been prepared by a boy.

On the top floor he can draw or paint or model or try his hand at cutting linoleum—in a word, give free play to his instinct for self-expression.

Dr. Thomas H. Briggs, who is professor of education at Columbia University, visioned a similar picture in his "dream for an ideal secondary school." Frederick William Sanderson, famous headmaster at Oundle, in England, used to throw the school workshop open to his boys and let them fool with chemicals, tools, and apparatus after school hours. Indeed, as a graduate of Oundle tells us, "one was led to suppose that a blind eye was turned to their use even at prohibited times, such as Sundays."

The Hill School will be one of the first American institutions ever to capitalize hobbies educationally, but, even without a special building, hobbies have long thrived at the Hill School. It was a Hill boy who read of John Hays Hammond, Jr.'s success in steering a boat by wireless from the shore and repeated the experiment with a model on the school pond.

Later came the radio craze—boys developing a wonderful practical knowledge of radio apparatus though ignorant of the theory. Just now there is a

huge interest in aviation. The boys build model planes, fly them, time them with stop watches, and see who can keep his ship up longest. Apparently, the next hobby to gain favor will be biology.

"It is our plan to provide small, well-equipped laboratories also for especially gifted students, where they can work on experiments far beyond those conducted in the regular classes and subsequent laboratory exercises," said Headmaster Wendell. "It is hoped that such incentives will do much to awaken scientific curiosity, which can be developed further in whatever college such students ultimately decide to enter."

CRITICISM AND COMPLIMENT

Frank D. Boynton, president of the Department of Superintendence during the past year, came into prominence by attacking American colleges and universities. He found that he could secure public notice by asserting that colleges are not overcrowded, that college teachers are incompetent, and that college administrators are asleep. Most college officers paid no attention to the attacks of Superintendent Boynton. President Edward C. Elliott, of Purdue University, saw that the significance of Superintendent Boynton's statements was not in the attacks but in the hospitable reception of the statements by public-school officers. He invited Superintendent Boynton to visit Purdue and verify or modify his judgments by examining that institution.

The result of the visit is a pamphlet, published as the February, 1929, number of the *Bulletin of Purdue University*, containing an address by Superintendent Boynton to the faculty of Purdue and a report on what he found at that university.

The address is couched in somewhat more cautious terms than were the earlier flaming utterances of this assailant of the colleges. In this address it is recognized that possibly some colleges are overcrowded. Superintendent Boynton's latest pronouncement on the matter is as follows:

But this is not to deny the assumption of overcrowding in the colleges. No one, so far as I am aware, is in a position either to affirm or to deny it.

It is well that Superintendent Boynton should find that there is some possibility that the colleges are not wholly dishonest and unintelligent.

The most revealing part of the pamphlet is the report on Purdue.

This report is somewhat overloaded with autobiographical items. A few extracts are as follows:

Gradually, as I walked and talked with these men, I became conscious of the presence of a controlling idea, dominant and pervasive, spreading like leaven into almost every part of the institution and giving promise of the ultimate leavening of the whole lump. That idea is the idea of service to the people—service not of some vague, diffused, general sort whose application to individual human lives is neither clearly seen nor greatly considered but service that shapes itself to meet in a practical way the educational aspirations of the people at the level where it finds them. . . .

Simple indeed it is as a method of determining admission but entailing post-admission problems which are anything but simple, problems which other institutions, lacking Purdue's high sense of obligation to the people, have chosen to evade. If the time ever comes when similar recognition shall be given generally by land-grant and state colleges and universities to their obligation to meet the growing demand for higher training for all types of mental endowment and when, in such institutions, efforts shall be made similar to those now making at Purdue to meet and solve the problems growing out of such democratization of higher education, then, indeed, we shall have come a long way on our path toward realization of our American ideal of equal opportunity for all. . . .

One can imagine the scornful impatience with which any proposal for the adoption of such a policy would be met by the haughty upholders of the tradition of academic exclusiveness.

As one reads the words of compliment to Purdue and the unsupported reference to those other institutions which are full of sin, one wonders what would have been the result if Superintendent Boynton could have visited several institutions of higher learning.

Surveys are excellent educational devices; they often do more for the surveyor than for the surveyed.

COMPARISON OF GRADUATES OF PUBLIC SCHOOLS AND PRIVATE SCHOOLS

The following statement appeared in *School Life*.

That students coming to Harvard University from public schools are better prepared for college than are students from private or "tutoring" schools is indicated by a study recently made at the University of the records of Freshman students in the classes of 1929 and 1930. It was found that, of 436 men in the class of 1929 who entered as Freshmen from public schools, 102 obtained ranks which gave them places on the dean's list, and 60 had unsatisfactory records. Of 411 Freshmen in the same class who came from private schools, 53 were put on the dean's list, and 92 had unsatisfactory records. In the class of 1930

the number of Freshman students who entered from public schools was eight more than the number of Freshmen who entered from private schools, but the number of those coming from public schools who at the end of their Freshman year were placed in the first three groups of the rank list was greater by fifty-four than the number of those who came from private schools. It was further found that public-school men in this group contributed fifty-eight fewer students to the number of those who had unsatisfactory records and nineteen fewer to the number of those whose connection with the college was severed. Of the forty-eight men who in 1927 entered the Freshman class from tutoring schools, two were placed on the dean's list; twenty made unsatisfactory records; and twelve had their connection with the college severed.

SEX EDUCATION

The United States Public Health Service has issued as V. D. Bulletin No. 87 a pamphlet of sixteen pages, entitled *Status of Sex Education in the Senior High Schools of the United States*, which describes the practices of high schools with regard to sex education. The pamphlet shows the extent to which such education is administered in different parts of the United States and in schools of different types. It also lists the topics commonly treated and describes the relation of sex-teaching to the other activities of schools.

Principals of high schools will find the bulletin very useful as a basis for determining their own practices.

EDUCATIONAL REFORMS IN COLLEGES

Anyone who is at all skeptical about the interest of colleges in methods of teaching should study the March, 1929, issue of the *Association of American Colleges Bulletin*, edited by Robert L. Kelly, executive secretary of the Association, which contains the addresses and proceedings of the fifteenth annual meeting of the Association of American Colleges. The address of the editorial offices of the Association is 111 Fifth Avenue, New York City. The bulletin shows clearly that the colleges in this country are considering the problems of teaching from every angle. High-school administrators and school superintendents who have been told in educational addresses by seekers after notoriety that colleges are moribund will find here so much evidence to the contrary that they will no longer be able to think of colleges as behind the schools in the study of educational problems.

IS THE JUNIOR COLLEGE A MENACE OR A BOON?

GEORGE F. ZOOK

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During the three hundred years of its history this country has produced some valuable courses of study in higher education which are now taking their places alongside the older curriculums in law, medicine, and theology begun in Europe many centuries ago. The liberal-arts college is a unique American contribution to higher education. Dental education and library science were born here. Agricultural and home economics education have carved out places for themselves, and extension education has reached its greatest success in the United States. All these contributions to educational thought and content resulted largely, though not exclusively, from the conditions of American life in the past. There is, moreover, every reason to predict that the social and economic changes of the next two generations will produce as many and as significant changes in the content and administration of higher education in this country as have occurred during the last two generations. Among the proposals for change in administration, the junior-college movement is certainly receiving its share of attention today.

The causes of the movement are, of course, somewhat complex. Some of the privately controlled junior colleges have voluntarily chosen this field of educational effort, but the larger number of such junior colleges in the South and West have been compelled by circumstances and the pressure of the accrediting agencies to restrict themselves to two years of college work. Many of them, however, which took this course from necessity some years ago now find much satisfaction in doing a grade of work that is accepted by recognized colleges and universities.

There are two factors which account for the popularity of the public junior colleges, most of which are municipal, namely, the rapid and inevitable trend in this country toward publicly controlled colleges and universities and the equally rapid and inevitable trend

toward urban institutions. In 1890 the number of students attending state and municipal colleges and universities was only 26.8 per cent of the total student body. In 1926, notwithstanding the fact that the number of these institutions was much less than the number of institutions under private control, the percentage of such students had risen to 40. When the students above high-school grade in the teachers' colleges and normal schools are included, the total number of students enrolled in public institutions is well above 50 per cent of the total student body in the entire country. Indeed, in a majority of states in the Union the public institutions now monopolize or dominate the situation in higher education.

The trend toward urban colleges and universities is just as certain and inevitable, and there is good reason for it. A number of years ago, after climbing around the hills and valleys of several states, including Tennessee, Missouri, Arkansas, and Oregon, in search of numerous small colleges and later returning to such centers of population as Memphis, Kansas City, Little Rock, and Portland, which at that time either contained no colleges at all or were quite inadequately supplied with college facilities, I realized more thoroughly than ever before that in the past the practice of locating colleges, like the practice of locating monasteries, was to put them where the people were *not* rather than where they were. Mohammed must go to the mountain. For example, in Ohio, which has numerous colleges, I was interested to find recently that, of the twenty-five largest cities in the state, each with a population of more than 25,000, only eight have regular college facilities of any kind, and several of these are quite inadequately supplied. By far the greater number of the colleges in Ohio are located away from the centers of population. The same thing is true of the colleges in a number of other states.

I do not question the educational advantages of this arrangement. There are, however, obvious disadvantages in the increased cost and in the unnatural, though perhaps delightful, environment of a large number of students away from home at college during the romantic years from eighteen to twenty-three. The municipal junior colleges are therefore a direct challenge to the traditional point of view that a college education should be secured away from home. It is believed that not only will a larger number of students

be reached but the ideal of public service will be better preserved if occasionally the mountain is brought to Mohammed. In this connection it is significant that, of the six municipal junior colleges in Michigan, only one is located in a city already containing a college, and that an inconspicuous one. In none of the five towns in Minnesota or the nine in Kansas which have established junior colleges is there any other college. Of the twenty-seven municipal junior colleges in California, only one has a competitor. Thus far, therefore, the city junior colleges are merely extending two years of college education to those in centers of population who otherwise would find it difficult or impossible to secure this advantage.

Is there, then, anything in this movement for the further democratization of higher education to justify the apprehensions of Professor George Herbert Palmer expressed in an article¹ in the *Atlantic Monthly* two years ago? As I understand this article, there are three points: (1) There is need of controversy concerning this movement, which has suddenly reached the proportions of "a torrent." (2) Students attending junior colleges are compelled to associate with those in the upper and lower grades of the high school rather than with Juniors and Seniors in the four-year college, a situation which is not regarded with favor. (3) When fully established, the junior-college system will exterminate the scholarly amateur, the peculiar product and the precious distinction of the American college in contrast to the European system of higher education. Fear on these points transcends in importance all other considerations in Professor Palmer's article.

With the assertion that there is need of controversy concerning the junior-college movement, everyone will agree. No matter how sound in principle may be the movement, it will be abused in practice unless criticism is frequent and searching. Thus far, college and university executives either have been too timid or have not taken the time to express their apprehensions concerning the movement. On the other hand, professional educators and administrators in secondary education have devoted their energy and efforts, so far as reorganization in educational administration is concerned, to the

¹ George Herbert Palmer, "The Junior College," *Atlantic Monthly*, CXXXIX (April, 1927), 497-501.

junior high school movement and have all but neglected the equally important junior-college movement, which may in fact, when fully considered, cause them to revise their conclusions considerably. I attribute this modesty to a certain hesitation on the part of the secondary-school people to take over the administration of the Freshman and Sophomore years of college work after having criticized the colleges severely for the way in which they administer them. However, I, for one, would derive a certain amount of satisfaction from what I believe would be a sobering effect on the secondary-school people of the country were they to be confronted squarely with the responsibility of actually correlating high-school work with the work of the first two years of college. Perhaps, when this responsibility is faced, Professor Palmer's desire for controversy will be fully satisfied.

To the second statement, that junior-college students do not have the benefits of association with the older and advanced students in college, several replies seem obvious. In the first place, by the same process of logic, it seems that we should accept as equally tragic the fact that we now deprive a much larger number of students in the secondary schools of the inspiration and example of the older students in the junior-college division. Obviously, any division of the field of effort into secondary and higher education will leave students who are preparing to pass from one division to the other with only the inspiration of their teachers above them and a sense of responsibility for a good example to those below them—a situation which, after all, is usually regarded as having something to commend it.

Inasmuch as I am interested in higher education rather than in secondary education, I prefer to attack this proposition from the point of view of the college. I leave it to my associates in college work whether our main problem today is not to wrestle with a rapidly increasing mass of high-school graduates many of whom are of mediocre ability and preparation and who often use their experience at college, however brief, as the open-sesame for social preferment. In other words, do what we may in the way of selecting students at entrance, we are yet constantly confronted with the danger of allowing this mass of Freshmen and Sophomores to lower

the standards of the institution and thus of submitting the advanced students and the good students to more association with immature and mediocre students than is wise. Taking the colleges and universities of the country as a whole, I believe that we should be much more concerned about this problem than about what may happen to college Freshmen and Sophomores through lack of association with upper-class men when junior colleges are "fully established."

Whoever dreamed, however, that junior colleges are going to be "fully established"? I wonder whether anyone is really apprehensive that the recognized colleges of the country will shortly be compelled to witness the extension of this junior-college "torrent" until it engulfs all the Freshmen and Sophomores of the country, thus reducing to the vanishing point the species known as under-class men in colleges and universities. I venture the assertion that, with the increasing tendency for young men and women to attend college, the present recognized colleges will continue to have all the Freshmen and Sophomores they desire, and more.

The junior colleges of the future will enrol three kinds of students: (1) those who are taking the first two years of the regular four-year course of study and expect later to complete their course of study in the usual college or university; (2) pre-professional students who desire to fulfil the minimum requirement of two years for entrance into the pre-professional schools; and (3) those who by nature are fitted for, and would, if given more opportunity, be interested in, certain completion courses of a semi-professional nature in business, home economics, technical work, and possibly teaching.

The last group is found in the four-year college today partly for social reasons and partly because the regular educational system seldom provides courses of study of this character. It seems clear that these students should be eliminated from the present colleges. If the junior colleges, through the establishment of courses of this character, succeed in enrolling such students, they will render a conspicuous educational service long neglected in this country, a service that will be an obvious boon to the colleges and universities.

Then there is the increasing group of pre-professional students who wish to fulfil only the minimum requirements for entrance into

professional schools. They take only the elementary college courses and hasten away to the professional schools; their absence often reduces the advanced classes in the colleges to very small numbers. Even while they are in college, their minds are likely to be fixed on their professional objectives. If, therefore, the establishment of junior colleges exercises any tendency to draw off this group of students from the regular colleges, leaving them free to devote their energies and financial resources to the four-year students, the result is clear gain for high standards in the colleges and universities.

Finally, there are the junior-college students who complete their work for the baccalaureate degree in the regular four-year colleges. Such investigations as those made in California¹ and those made by Professor L. V. Koos,² of the University of Minnesota, indicate that these students acquit themselves during their Junior and Senior years as well as do the students who spend their first two years in regular colleges. If, therefore, this situation continues, we may look forward confidently to the time when, through the transfer of junior-college graduates to regular colleges for advanced work and the withdrawal of professional and semi-professional students from the colleges, the number of upper-class men in a given college will equal, perhaps exceed, the number of Freshmen and Sophomores. I do not see how we can fail to draw the conclusion that this would be a tremendous relief from our present unhappy situation.

The four-year college is therefore not doomed to extinction. No matter how widely junior colleges may be established, there will still be a large part of the population which prefers to spend four years in a single institution. Such a practice has both the weight of tradition and thousands of devoted friends to commend it indefinitely. The colleges will not be faced with the necessity of surrendering the first two years of college work and of turning themselves into professional schools, as in Europe. The only choice, indeed, which they will gradually be required to make is whether they will devote the major

¹ Walter Crosby Eells, "The Junior College Transfer in the University," *The Junior College: Its Organization and Administration*, p. 187. Edited by William Martin Proctor. Stanford University, California: Stanford University Press, 1927.

² Leonard Vincent Koos, *The Junior College*, p. 236. Research Publications of the University of Minnesota, Education Series, No. 5. Minneapolis, Minnesota: University of Minnesota, 1924.

part of their efforts and financial resources to the process of selecting and eliminating a mass of students in the first two years of college, as at present, or whether they will take advantage of the existence of the junior colleges and place their major emphasis on advanced work for upper-class men. In other words, are we willing to reverse the present situation? I feel certain that many college administrators and teachers are consciously or unconsciously yearning for such an opportunity.

I do not believe, therefore, that the junior-college movement will exterminate the scholarly amateur or the colleges, which are the peculiar and most precious distinction of American higher education. How in sound reason can this assertion be taken seriously? To accomplish this transformation, it must be assumed that the opportunities for graduates of technical and professional schools may be expanded indefinitely. Obviously, this is not possible. There are already more lawyers than the country needs. The number of physicians is perhaps not adequate, but it is rapidly becoming so. There are enough dentists except in the rural districts. There are plenty of pharmacists for this vanishing profession. There is a steady demand for engineers but not a sufficient demand to have increased the enrolment at the engineering colleges perceptibly during the last five years. The enrolment in agricultural curriculums has greatly declined in recent years because of the lack of opportunities for graduates. The demand for teachers is fixed by conditions and is subject to little change. Even business, buoyant as it is, cannot absorb an indefinite number of professional graduates. In fact, is it not clear that opportunities in each and all of the professions are by their very nature definitely limited and that there will therefore be no tremendous rush to the professional schools to fill a demand for professional graduates which does not exist? Indeed, on the other hand, is it not a fact that the field of the scholarly amateur is the only one which can be expanded indefinitely?

I believe that this is actually what is taking place in this country. At any rate, reference to the statistics of the United States Bureau of Education shows that for the year 1925-26, of a total of 730,753 students, 368,600, or more than 50 per cent of all the students in the colleges and universities in the United States (junior colleges

excluded), were enrolled in colleges of liberal arts and science. If to this number one adds the graduate and professional students who secured baccalaureate degrees (63.5 per cent in the case of medical graduates in 1928) or who were pursuing liberal-arts courses as a part of such curriculums as engineering, agriculture, home economics, and teacher-training, I believe that it could be demonstrated beyond doubt that two-thirds of the efforts of our higher institutions is being devoted to general cultural education. The education of the scholarly amateur is, therefore, still the main business of higher education in this country. Indeed, it overshadows all other efforts combined.

The fact is that we are dealing with a complex series of factors, some favorable and some unfavorable, which, instead of depleting the colleges of liberal arts of students, is filling them to overflowing. Psychologically, the superior students naturally postpone their professional education until after they have graduated from college; the professions more and more demand men and women of extended general education as well as professional education; students with uncertain life-objectives usually enrol in the college; the college is the Mecca of those who are seeking social respectability. Indeed, so great is the faith of American students in the effectiveness of the college that most of them depend on it blindly not only as a preparation for the life of a scholarly amateur but as a sufficient training for the multitudinous business, civic, and public offices not requiring specific and formal professional education. Therefore, the problem of higher education in America, exactly as is the case with secondary education, is not to increase the faith of students in general and cultural education but rather to induce them in larger numbers to add to it preparation for some useful profession or vocation.

The New York State Board of Regents recently granted the right to establish a junior college near New York City. The announcement was accompanied, however, by the naïve statement that it is not to be called a junior college inasmuch as it is to give the first two years of a regular college course of study and therefore has no resemblance to "a type commonly prevailing in the West, where the course of study is merely superimposed on a high school."

Here, at last, we have the crux of the matter. Are there in fact

grounds for adverse criticism of the standards of work in junior colleges? It would be strange if there were not. It is well known that few states have any legal standards concerning the establishment and maintenance of educational institutions, particularly those in the realm of higher education. It is perfectly possible, therefore, for any educational institution, including the junior college, to operate on low standards, and a new institution without traditions is doubtless more susceptible to the temptation than is any other. Frankly, therefore, I am very fearful that this situation presents an actual danger to a movement which in principle is sound but in practice may be abused. Indeed, it has doubtless resulted in the establishment in some states of a larger number of public junior colleges than the financial resources and the enrolment justify.

For a part of this situation, those who are interested in college education are directly responsible. In our zeal to require acceptable standards of college work in the junior colleges, we have insisted through our accrediting agencies, such as the North Central Association of Colleges and Secondary Schools, that the work of the junior colleges must be of college grade and, to insure this standard, that the faculty, students, buildings, and equipment of junior colleges must be separated from those of secondary schools below. This is a perfectly natural first reaction, and, in view of the constant danger of a lapse in educational standards, I am of the opinion that temporarily it has been a wholesome policy.

This policy will not, however, stand the test of reason, and it certainly has not stood the test of experience. The plain fact is that, with the possible exception of completion units, such as nursing, secretarial science, and various forms of technical education, no two-year unit in education which is separated administratively from the preceding unit or from the following unit can possibly be effective. The junior college is no exception. A number of the private junior colleges which at our insistence reduced their college offerings to two years of college work and divorced themselves from the secondary-school work below are now coming to us with the positive statement that in our zeal to maintain high college standards we have asked them to do an impossible thing, and my observation leads me to believe that they are correct. It should be remembered

that the junior-college movement is basing its claims squarely on the fundamental consideration that the period of secondary education here, as in Europe, is logically longer than the present four-year high school and that under present conditions in the United States practically all of what is now included in the first two years of college necessarily should be classified and hence administered as a part of an enlarged secondary-school system.

Witness the struggle which the colleges are experiencing to avoid accepting the logic of this situation. For example, to avoid the necessity of devoting their first two years largely to secondary-school work, the colleges are setting higher and higher standards of admission, which frequently make it necessary for students to spend five years in high school and academy prior to entering college. A large number of prescribed units are required; students are accepted only from the highest third of the class; tests for native ability as well as subject matter are applied more and more frequently; and even the characteristics of students are scrutinized with increasing care—all for the purpose, as I believe is generally admitted, of enabling college administrators and faculty to devote the energies and resources of the college so far as possible to higher education rather than to a continuation of general secondary education. Even with all these somewhat frantic efforts to secure Freshmen above the average in ability and preparation, I know of only one institution which is bold enough to announce that at least three years of its four-year college course is of advanced character and should therefore truly be designated as higher education.

Those who are interested in the junior-college movement merely wish to assert that the present illogical division of work between the secondary schools and the colleges and the resulting repetition of subject matter with the consequent loss of time, reliably estimated at approximately one-half of an entire year, justify at least the experiment of adding to the secondary-school program approximately two additional years of work with proper standards in order to demonstrate the legitimacy of the junior-college claims.

I am much interested, therefore, in the results of an experiment which is now being made at Stephens Junior College, Columbia, Missouri. The Commission on Institutions of Higher Education of

the North Central Association of Colleges and Secondary Schools recently gave permission to that institution to extend its efforts down into the field of high-school education in order to carry on the experiment of actually co-ordinating under a single administration the fields of secondary and junior-college education. In order to insure the maintenance of proper standards, a committee of the Commission was appointed to watch over and report on the experiment. Inasmuch as this is one of the best junior colleges in the Middle West, the results of the experiment ought to go a long way toward proving or disproving the assertions of the junior-college proponents that the two fields logically belong together. Additional experiments along the same lines and under proper standards are urgently needed in this country. Until we have results from extensive experiments of this nature, the claims of the proponents and of the opponents of the junior-college movement will remain largely mere academic opinion.

Let me repeat. The junior-college movement is in no wise a fundamental attack on the existence of the liberal-arts college. As has been true of other developments in higher education in the United States, it is rather a supplement, which, by drawing off pre-professional and semi-professional students from the present colleges and allowing these colleges to devote their energies and resources more largely to the purpose for which they were established, will enable us more nearly to approach the standard of our ideals in college education. Furthermore, the establishment of city junior colleges in various centers of population will undoubtedly enable many young men and young women who otherwise would be unable to do so to secure two additional years of education at small expense. Altogether, the movement seems to me to have more implications for good in the fields of both secondary and higher education than has any other single proposal which is now before us for consideration.

SUBJECT COMBINATIONS IN THE PROGRAMS OF TEACHERS IN SMALL SECONDARY SCHOOLS IN NEW YORK STATE

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What combinations of subjects may the college Senior expect to be asked to teach after graduation? What subject combinations should the high-school principal establish for the various members of his teaching staff? In what major and minor fields should the prospective academic teacher be advised to specialize? This article is the result of an attempt to answer these questions.

The problem of teacher placement is of vital concern to such service agencies as the Appointment Bureau of the New York State College for Teachers, which assists prospective graduates by establishing contacts with existing vacancies. In the past this bureau has experienced considerable difficulty in making recommendations to superintendents because of the lack of agreement between the groups of subjects required in the various vacancies and the subjects chosen as majors and minors by the prospective teachers. A study was therefore undertaken in an attempt to ascertain the present status of subject combinations in the small secondary schools in New York State.

In the autumn of 1927 a request for copies of the teaching schedules of both principals and teachers was sent to approximately 350 secondary-school principals. Replies were received from 225 schools, 210 reports being usable. In the schools reporting, 178 principals teach one or more subjects in addition to their executive and administrative duties. The teaching programs of 1,128 classroom teachers, exclusive of teaching principals, were secured. The median number of teachers in the 210 schools is 5. Approximately one-fourth of the schools employ more than seven teachers, and approximately one-fourth employ three teachers or less. These figures indicate that the data here presented are concerned with small secondary

schools, in which the majority of the graduates of most colleges serve immediately after graduation.

The present study seeks to determine the subject combinations existing in the 210 secondary schools during the school year 1927-28. The assumption is made that the present subject combinations will influence the selection of new teachers. It is admitted that this assumption is probably not entirely justified. Exceptions will undoubtedly occur, but it is believed that, in general, the present combinations will continue to exist. Certainly, a beginning is made toward a controlled estimate of future subject combinations when present conditions are studied.

TABLE I

DISTRIBUTION OF THE 178 PRINCIPALS WHO TEACH ON
THE BASIS OF THE NUMBER OF SUBJECTS TAUGHT

Number of Subjects Taught	Number of Principals	Percentage of Principals
1.....	60	33.7
2.....	55	30.9
3.....	45	25.3
4.....	15	8.4
5.....	3	1.7

The term "subject" as here used may well be defined. For the purpose of this study all classes in English are listed as one subject—English. The subject of history includes civics, which is required in the state of New York for one semester in addition to ancient, modern, and European history. Commercial arithmetic is classified with algebra and geometry as mathematics unless it is taught by a teacher who is teaching such courses as typewriting and stenography, in which case it is classified as commerce. This arbitrary procedure is based on the belief that a teacher who has a major or a minor in either mathematics or commerce is prepared to teach commercial arithmetic. All other subject classifications are self-explanatory.

The number of subjects taught by the 178 principals who teach varies from one to five. The complete distribution is presented in Table I. This table shows that the teaching principal in the small secondary school has 64.6 chances out of 100 of being asked to teach two subjects or less. On the other hand, he has 35.4 chances out of

100 of being asked to teach three subjects or more. Since in 25.3 per cent of the cases studied the principal teaches three subjects, it is probably wise for a prospective principal to be prepared to teach in a second minor field.

In general, the smaller the school, the larger the number of subjects taught by the principal. This would seem to indicate that, when the principal moves from a small school to a larger school, he takes on a larger amount of executive and administrative work, and his classroom teaching is correspondingly decreased. Of course, this condition is also influenced by the fact that the few teachers in the small secondary school must present an entire secondary-school program.

Some idea of the frequency of the various subject combinations in the teaching programs of the secondary-school principals may be secured from Table II. In all cases where combinations occur so seldom that they are not significant, blank spaces appear in the table. Column 1 shows the fourteen subjects which appear in the programs of the 178 principals. These subjects are arranged in the order of total frequency in the programs. Mathematics is seen to be the most frequent, occurring in 105 of the 178 programs. Music appears least frequently. The data indicate that the prospective principal should select his major and minor subjects from the following: mathematics, physics, biology, and history. When a student selects mathematics as his major subject, what should he select as his minor subject? Table II indicates that mathematics appears in combination with other subjects seventy-nine times. Columns 5, 6, and 7 show that it is combined most frequently with physics (fifty-eight times), next most frequently with biology (thirty-one times), and next most frequently with history (sixteen times). These figures would indicate that the chances of a principal teaching mathematics and physics are about twice as great as his chances of teaching mathematics and biology and 3.6 times as great as his chances of teaching mathematics and history.

The policy of many of the small high schools in New York State is to offer physics one year and chemistry the next. This alternation of subjects should be considered in interpreting Table II. When alternation is taken into consideration, it is probably true that the

best subject-matter preparation from the point of view of the teaching principal is a major and a minor chosen from mathematics, physics, biology, history, and chemistry. As much work as possible should be completed in a second minor chosen from this list of subjects. In many instances the only item of history in the program is civics; for this reason, when considerable work cannot be completed in history, it is probably wise to complete at least one course in government.

TABLE II

FREQUENCY OF SUBJECT COMBINATIONS IN THE PROGRAMS OF 178 PRINCIPALS*

Subject	Fre- quency of Occur- rence in Differ- ent Pro- grams	Fre- quency of Occur- rence as a Single Sub- ject	Fre- quency of Occur- rence in Combi- nation	Most Frequent Combination	Second Most Frequent Combination	Third Most Frequent Combination	
	1	2	3	4	5	6	7
Mathematics.....	105	26	79	Physics (58)	Biology (31)	History (16)	
Physics.....	90	8	82	Mathematics (58)	Biology (33)	History (22)	
Biology.....	46	1	45	Physics (33)	Mathematics (31)	History (11)	
History.....	46	13	33	Physics (22)	Mathematics (16)	Commerce (11)	
Commerce.....	19	1	18	Mathematics (15)	Biology (11)	Physics (10)	
Chemistry.....	19	1	18	Physics (10)	Biology (6)	History (3)	
Physical geography	13	0	13	Biology (7) Mathematics (7) Physics (7) History (6)	Mathematics (6)	.....	.....
Latin.....	13	1	12	Mathematics (5)	Physics (4)	.....	.....
English.....	9	2	7	Latin (5)	English (5)	.....	.....
Agriculture.....	7	6	1	.....	History (4)	.....	.....
General science.....	5	0	5	Mathematics (3)	Physics (2)	.....	.....
French.....	4	1	3	.....	Chemistry (2)	.....	.....
Drawing.....	3	0	3	.....	.....	.....	.....
Music.....	1	0	1	.....	.....	.....	.....

* The sum of the combinations listed in Columns 5, 6, and 7 does not equal the number in Column 4. If a principal teaches mathematics, physics, and biology, mathematics is listed in Column 4 as appearing in one combination program while the combination of mathematics and physics is recorded in Column 5 and the combination of mathematics and biology in Column 6.

The number of subjects taught by the 1,128 teachers varies from one to five. This variation is the same as that found in the case of the teaching principals. The complete distribution of teachers is presented in Table III. This table shows that the teacher in the small secondary school has 83 chances out of 100 of being asked to teach one or two subjects. The chances of his being asked to teach three subjects or more are 17 out of 100, or less than one-half as

great as those of the teaching principal. The obvious conclusion seems to be that the smaller secondary schools are practically on a one- and two-subject basis for teachers. The situation is not the

TABLE III
DISTRIBUTION OF THE 1,128 TEACHERS ON THE BASIS
OF THE NUMBER OF SUBJECTS TAUGHT

Number of Subjects Taught	Number of Teachers	Percentage of Teachers
1.....	471	41.8
2.....	464	41.1
3.....	147	13.0
4.....	41	3.6
5.....	5	0.5

TABLE IV
FREQUENCY OF SUBJECT COMBINATIONS IN THE PROGRAMS OF 1,128 TEACHERS

Subject	Frequency of Occurrence in Different Programs	Frequency of Occurrence as a Single Subject	Frequency of Occurrence in Combination	Most Frequent Combination	Second Most Frequent Combination	Third Most Frequent Combination
English.....	314	89	225	History (73) English (73)	Library (51) Latin (42)	French (45) Mathematics (34)
History.....	253	43	210			Biology (33)
Mathematics.....	228	77	151	Biology (43) French (90)	Physics (39) History (42)	History (34)
Latin.....	212	37	275	French (90) Latin (90)	English (49) History (42)	French (33)
French.....	196	15	281	Latin (90)	English (43) History (42)	English (29)
Biology.....	147	1	146	Chemistry (49)	Physics (41)	History (33)
Commerce.....	138	82	56	History (28) Biology (46)	Mathematics (18) Physics (41)	Mathematics (43)
Physics.....	89	2	87	Chemistry (46)	Mathematics (39)	English (10)
Drawing.....	82	28	54	English (15)	History (12)	Music (11)
Chemistry.....	80	0	80	Biology (49)	Physics (46)	Mathematics (26)
Library.....	73	0	73	English (51)	History (16)	
Home economics.....	50	45	5			
Music.....	29	16	13	Drawing (11)		
Physical education.....	25	15	10			
Agriculture.....	24	14	10			
Physical geography.....	22	0	22	Biology (15)	Mathematics (10)	
Spanish.....	13	1	12			
General science.....	11	0	11			
German.....	8	0	8			
Industrial subjects.....	6	6	0			

same in the case of the teaching principal, who has only 64.6 chances out of 100 of teaching one or two subjects.

Table IV is designed to furnish a basis for the prospective classroom teacher to select major and minor subjects that have a high

probability of being demanded. This table shows that English appears in 314 of the 1,128 programs. Each of seven subjects appears in more than 10 per cent of the programs. Arranged in the order of frequency of appearance, these seven subjects are English, history, mathematics, Latin, French, biology, and commerce. The six subjects which appear most frequently as single subjects are English, commerce, mathematics, home economics, history, and Latin. For the classroom teacher the languages rank high and the sciences low. It will be noticed that in no program does library science appear

TABLE V
FREQUENCY OF APPEARANCE OF TWO-SUBJECT COMBINATIONS
IN THE PROGRAMS OF 1,128 TEACHERS

Subjects	Number of Times Subjects Appear in Combination
French and Latin.....	74
English and history.....	49
English and French.....	36
English and library.....	35
History and Latin.....	26
English and Latin.....	19
French and history.....	18
History and mathematics.....	13
Biology and mathematics.....	10

alone. Inasmuch as English appears in 314 programs and library in but 73, the suggestion may be made that a student who is attracted to both English and library will do well to major in English and minor in library. This emphasis probably will assure to such a student a high probability of obtaining a position. The three best combinations seem to be French and Latin, English and history, and English and library.

The difference in subject emphasis between principals and teachers is illustrated by commerce. The order of the minors in connection with commerce is mathematics, biology, and physics for the principals and history, mathematics, and English for the teachers.

Table V shows the number of cases in which two subjects appear in combination. Combinations that total less than ten are not included.

Table VI shows the three-subject combinations. Only those groups which appear a total of six or more times are listed. In but one instance do the same three subjects occur more than ten times in combination.

Table VI shows that mathematics and science appear more often in three-subject combinations than do other subjects. This would seem to indicate that the conclusions drawn with respect to these subjects for teaching principals apply equally well to classroom teachers except that the proportion of opportunities available is much less.

The subject combinations shown in this study should guide not only the student who is preparing to enter the profession but also

TABLE VI
FREQUENCY OF APPEARANCE OF THREE-SUBJECT COMBINATIONS
IN THE PROGRAMS OF 1,128 TEACHERS

Subjects	Number of Times Subjects Appear in Combination
Biology, chemistry, and physics.....	16
Chemistry, mathematics, and physics.....	8
Biology, mathematics, and physics.....	7
English, history, and library.....	6

the school administrator who has the task of selecting new teachers. If school officers will organize their teaching assignments in such a manner that the combinations which are now most frequent can become standard, the task of the teacher-training institutions will be much simplified. The combination of French and Latin is satisfactory from the point of view of college majors and minors, as is the combination of English and history or English and library.

When the administrator assigns to teachers such combinations as Latin and commerce or English and physics, the road is open to an exceedingly large number of combinations. Such procedures present an impossible situation for the teacher-training institutions. As a result, the secondary-school teacher may be found teaching a subject which he did not study in college. This is a serious handicap to the pupils, who are the one important reason for the existence of teachers.

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The junior high school movement has spread widely throughout the state of Michigan. All told, as reported by the state superintendent of public instruction, 115 junior high schools are in operation in 90 cities, enrolling approximately 1,100 teachers and 46,000 pupils in Grades VII-IX, inclusive. This means that nearly 40 per cent of the children in Michigan of junior high school age are being trained in intermediate schools distinctly separated from the lower and the higher grades. The statistics cited are indicative of the remarkable growth of the junior high school, unequaled in rapidity by the development of any other educational movement in the history of the state or the nation during the last twenty years. State school officers, asked to designate one school which may be considered representative of the best experimentation going forward in the state of Michigan, named the Walter H. French Junior High School of Lansing.

The plant.—The Walter H. French Junior High School, one of three intermediate schools in Lansing, is situated on the south side of the city, in a district largely populated by families whose industrial connections are with the Reo Automobile Company. The school of 40 teachers and 830 pupils is housed in a \$600,000 plant. The admirably constructed building, standing on a six-acre tract, is triangular in shape; the front entrance lies at one angle of the triangle and faces the intersection of two city streets. To the front and on the sides of the building are spacious lawns with attractive landscape gardening, which are kept immaculate by the pupils in spite of the occasional depredations of the general public. To the rear are spacious playgrounds for outdoor games. A visitor is impressed by the immense advantage of comparatively ample school sites in a city of 60,000 as contrasted with the far more restricted

areas available for school sites in such a city as Detroit or Chicago. However, one marked disadvantage is observable in any city of open spaces: some of the pupils have to walk two miles to and from the school, a condition which will be remedied in part in Lansing when a fourth junior high school, now contemplated, is erected.

Within the building itself, modern conceptions of school architecture have prevailed. The classrooms are commodious, admirably lighted, and provided with comfortable seats. The laboratories in the manual arts and the sciences are unusually well equipped. Materials for work are abundant in the classrooms themselves. On the second floor an assembly hall seating 1,200 is easily accessible through several entrances; pupils whose home rooms are on the third floor enter the gallery of the assembly hall, a door to which opens almost directly opposite each home room. The entire student body readily assembles within two minutes after a warning bell. To the rear of the assembly hall are two large gymnasiums, one for the boys and one for the girls, and below, on the ground floor, is a large swimming pool. The swimming pool, situated above the ground level, is in an airy, well-lighted, heated, and ventilated room. At the left of the entrance to the swimming pool are lockers and group showers for the boys, and at the right are lockers and individual showers for the girls. An excellent cafeteria with kitchens occupies the ground floor in front of the swimming pool and the showers. Lining the walls of the corridors on all three floors are built-in individual lockers furnishing each pupil a private storing-place for his books and wraps within twenty feet of his home room. Naturally, the interior corridors on the two lower floors, with daylight inaccessible except at the ends of the halls, have to be lighted artificially.

Library facilities.—The entire plant offers but a single feature which is disappointing, especially to one who feels that in matters of equipment the social sciences deserve consideration equal to that accorded the manual arts and the natural sciences. Provision for the school library is inferior to provisions for libraries in the junior high schools of Detroit, for example. Situated close to the main entrance on the ground floor, the small library of the Walter H. French Junior High School is crowded throughout the day, far overtaxed by eager pupils, some of whom come from home rooms two

flights of stairs and hundreds of feet away. At every interclass period children wait in a long line for their withdrawal cards to be stamped, while others endeavor to read at tables constantly jostled by waiting lines. Such crowding is especially regrettable because the instructional staff and the children appear to be distinctly aware of the interest and the value that lie in the library experiences; they create a demand that can never be adequately met under the present arrangements. Plans are going forward to annex an adjoining classroom to serve as a reading-room apart from the open shelves and the receiving desk. As in the case of Detroit's model school libraries, the space occupied by several classrooms in front of the assembly hall on the second floor might well have been devoted to a library. The present library room was located with the highly commendable purpose of establishing a branch of the city public library, open to the general public in the evening. Books and reading matter for adults kept in a small room near the main entrance would, indeed, greatly enhance the value of the school plant to the adults in the neighborhood. To meet the curricular needs of the school itself, however, every new junior or senior high school building in Michigan or in any other state might well follow the lead of Detroit in adequate school-library location and equipment. School libraries in the coming decades will be as commodious, as conveniently located, and, let us hope, as generally used, as gymnasiums or swimming pools.

The serious deficiency thus described is, in the judgment of the writer, the one exception which by contrast tests the general truth: physically, the Walter H. French Junior High School is unusually well planned.

The curriculum.—The curriculum of the junior high schools of Lansing is published in a series of pamphlets of which any city system might justifiably be proud. For each of the subjects—social science, English, music, and the rest—a course of study extends through the three clearly marked divisions: Grades I-VI, inclusive; Grades VII-IX, inclusive; and Grades X-XII, inclusive. Each subject is an organized whole for twelve grades, with allotments of subject matter and activities suitable for each year of the respective school units; each course of study is obviously made by co-operating committees and carefully edited by a competent central agency; the

result is a definitely progressive course of enlarging outlooks, which insures practical articulation of the endeavors of the three groups of grades. The present writer has never seen school documents which surpass the Lansing courses of study in the indispensable element, articulation of parts.

The courses of study for the junior high schools of Lansing are as follows:

REQUIRED AND ELECTIVE SUBJECTS

VII B Required	Hours per Week	VII A Required	Hours per Week
English I.....	5	English II.....	5
Mathematics I.....	5	Mathematics II.....	5
Social Studies I.....	5	Social Studies II.....	5
Household Science I (girls).....	5	Household Art I (girls).....	5
Household Mechanics I (boys).....	5	Household Mechanics II (boys).....	5
General art.....	5	General language.....	5
Physical Education and Health I.....	4	Physical Education and Health II.....	4
Music I.....	1	Music II.....	1

VIII B Required	VIII A Required
English III.....	5
Mathematics III.....	5
Social Studies III.....	5
General Science I.....	5
Physical Education and Health III.....	4
Music III.....	1

Elective—Choose One

Latin I.....	5	Latin II.....	5
Commercial Art I.....	5	Commercial Art II.....	5
Penmanship.....	5	Business training.....	5
Household Science II.....	5	Household Art II.....	5
Cafeteria.....	5	Cafeteria.....	5
Mechanical Drawing I.....	5	Woodwork.....	5
Agriculture I.....	5	Printing I.....	5
Orchestra.....	5	Agriculture II.....	5
Band.....	5	Orchestra.....	5
		Band.....	5

	IX B Required	Hours per Week		IX A Required	Hours per Week
English V.....	5		English VI.....	5	
Mathematics V.....	5		Mathematics VI.....	5	
Social Studies V.....	5		Social Studies VI.....	5	
Physical Education and Health V.....	4		Physical Education and Health VI.....	4	
Music V.....	1		Music VI.....	1	

Elective—Choose Two

Latin III.....	5	Latin IV.....	5
Latin IX B-I.....	5	Latin IX A-II.....	5
Practical design.....	5	Illustrating.....	5
Bookkeeping I.....	5	Bookkeeping II.....	5
Typewriting I.....	5	Typewriting II.....	5
Household Science I.....	5	Household Science II.....	5
Household Art I.....	5	Household Art II.....	5
Physiology and Hygiene I.....	5	Physiology and Hygiene II.....	5
Cafeteria.....	5	Cafeteria.....	5
Printing II.....	5	Mechanical Drawing II.....	5
Metal-work.....	5	General geography.....	5
Plants and Animals I.....	5	Plants and Animals II.....	5
Agriculture I.....	5	Agriculture II.....	5
Orchestra.....	5	Orchestra.....	5
Band.....	5	Band.....	5

Elective—Choose Two

Latin IV.....	5
Latin IX A-II.....	5
Illustrating.....	5
Bookkeeping II.....	5
Typewriting II.....	5
Household Science II.....	5
Household Art II.....	5
Physiology and Hygiene II.....	5
Cafeteria.....	5
Mechanical Drawing II.....	5
General geography.....	5
Plants and Animals II.....	5
Agriculture II.....	5
Orchestra.....	5
Band.....	5

NOTE.—A pupil may take any elective subject offered in his grade or any elective previously offered.

This list of subjects reveals several facts indicative of an intelligent interpretation of the functions of a school for children of adolescent age. First, it is a "constants and variables curriculum," with the emphasis distinctly on the constants, the subjects which furnish "common integrating education." Seemingly, seventh-grade pupils in Lansing have no electives; eighth-grade pupils have one elective; and ninth-grade pupils, two electives. However, individual pupils even in the seventh grade who have a very marked propensity for some elective are allowed to select, even guided into electing, supplementary work such as music or drawing. Thus are utilized interest and proficiency to make school life attractive and successful. Second, the curricular experiences of the junior high schools are de-

liberately made conducive to continuation in the senior high schools. For any one of the three special curriculums of the senior high schools—academic, commercial, and industrial—every junior high school graduate is eligible no matter what courses he has taken in Grades VII-IX.

A third commendable feature of the curriculum is the prominence given to physical education and health. Four class periods a week of forty-five minutes each are devoted to physical education during the three full years, and four full-time teachers of physical education supervise the games, the corrective drills, and the remedial work needed by the usual proportion of pupils, approximating three out of one hundred. Music is required of all; group singing is stressed; pupils in the band and orchestra are given credit for electives, even for three full years. Groups of children regularly receive violin lessons from an expert teacher. The required course in art in Grade VII B is followed by electives as liberal as those in music; a pupil can elect art throughout the three years. On the whole, the curriculum is rich in avocational lines.

A fourth comment concerning the curriculum is indicative of the spirit of the junior high schools of Lansing. Within reason, a pupil may at any time take any elective subject offered for his grade or any elective offered for an earlier grade. In effect, this means that no printed regulations are permitted to be the last word in the case of individuals with special needs. If the course of study as laid down is in any way subversive of individual needs, it is altered to meet the occasion.

Provisions for individualization.—Homogeneous grouping is not extensively practiced in the French Junior High School although the staff favors ability grouping and practices it as fully as conditions permit. Extreme ability grouping is not feasible in a small school. However, individualization of instruction, certainly a major keynote of the junior high school everywhere, is attained by the French Junior High School in three major ways. First is the emphasis on projects which require individual initiative, observable throughout most of the classes. For example, the eighth-grade classes in general science are kept constantly alert for "discoveries." A discovery is any phenomenon of nature which a child may observe and report

to the class group, using objective evidence whenever possible. In one fifteen-minute period observed by the writer, six pupils told of their discoveries, which ranged from the sprouting of an acorn to a deposit of fish eggs. Such "discoveries" in science are indicative of the constant encouragement and guidance given throughout the school to individuals to carry through extra activities and volunteer enterprises. Special investigations and reports for the benefit of the class group afford abundant opportunity to enrich school experience. "Socialization," deservedly a keynote of the education of adolescents, very largely takes the form of true group contributions rather than petty faultfinding of one pupil's contributions by his fellow-pupils, too often witnessed in formal "socialized" recitations.

A second means of securing individualization is the practice in many courses of laying out the required work in job sheets, which the pupils can complete as rapidly as they choose. Naturally, this commendable practice requires many contacts between individual pupils and the teacher and enables the latter to provide advanced activities for the more capable pupils. Rapid promotion is sometimes resorted to, and high-grade pupils frequently take advanced work in the summer school and occasionally in the evening school; but, in general, the practice of this school favors enrichment of educational experiences rather than rapidity of promotion.

A third practice which insures individualization is the general utilization of informal workshop or laboratory procedures. Everywhere the pupils are at work; mere recitations based on home study are reduced to a minimum. Instructors are obviously more interested in guiding pupils' processes than in appraising and marking pupils' products. Even the uniform assignments are accompanied by supplementary activities, which, of course, are not required of the less capable pupils but which constantly challenge the voluntary endeavors of the more capable. Incidentally, the instructors are extremely careful in the distribution of time within the forty-five-minute periods. They allow about half of the time for discussion and recitation; the other half is spent in supervised study. For the latter work, each teacher is encouraged to formulate her own methods. As part of the program of preparation for life in the senior high school, gradually increasing amounts of home study are required in

the eighth and ninth grades. Forty-five minutes, distributed so as to avoid monotony, constitute a period quite long enough for one day's attention to any school subject on the part of adolescents.

Avocational clubs.—As in most junior high schools, provisions for individualization are especially noticeable in the avocational "clubs," which have their regular weekly meetings each Wednesday during the first class period. Such clubs, some thirty in number and open in election to all but the VII B pupils, cover the usual range of interests—music, drama, travel, photography, and the rest. The names are indicative of the wide range of avocational interests thus fostered: Squad Leaders' Club, Chemistry Club, Mathematical Recreation Club, Reporters' Club, VII B Home Room, Gift Club, Southern Star Club, Raffia Art Club, Continental Code Club, Embroidery Club, Expression Club, Puzzle Club, Red Cross Life Saving Club, Clogging Club, Home Economics Club, Newsy Club, Classical Club, Etiquette Club, Engraving Club, Arts and Crafts Club, Rope and Knot Club, Boutonnière Club, Art Wax Club, Political Club, Travel Club, Current History Club, and Dramatic Club.

One who is familiar with extra-curriculum club activities, a potent agency in the true socialization of the junior high school, is always interested in knowing whether the "remedial," the "restoration," the "failure-prevention" idea is correlated with them. The Walter H. French Junior High School, now only in its fourth year of operation, has not yet instituted this commendable correlation. In addition to the Mathematical Recreation Club, for example, a Mathematical Opportunity Club might be maintained, to which could be sent the pupils who are in danger of failing. Similarly, all the academic departments, emulating the practice of the Oliver Wendell Holmes Junior High School of Philadelphia, might materially reduce retardation and failure. It is to be understood, of course, that the remedial clubs here suggested are in addition to the purely recreational clubs in the school subjects.

The opportunity room.—The suggestion just made is rendered less pertinent in the case of the French Junior High School by the noteworthy experiment being made to prevent failures by another, even better, method. Perhaps the most unusual attempt of the

school to provide for individual needs is the operation of an "opportunity room," an ungraded room enrolling over-age and retarded children who at fourteen years of age are sent from the elementary schools of the district. Included also in the opportunity room are pupils who have failed in the first half of the seventh grade. For this group, averaging about twenty-five in number at any one time, a special program of remedial work is provided, including reading, word study, arithmetic, and language. To these pupils a skilled teacher devotes all his time, trying to guide them as a group and as individuals into better habits of work, into larger ambition for educational advantages, and into wider interest in life-problems. As an example of the constant endeavor to objectify the learning processes for these problem cases, the "school store," which is maintained by the opportunity room, may be cited. Various small supplies needed by the school population are sold during recess periods; the children in the opportunity room assume full responsibility under their teacher's supervision. More than \$75 of the profits was expended last year for unfortunate children of indigent families who needed medical treatment. Painstaking attention to remedial measures results in the restoration to normal school life of about half of the retarded pupils and prepares many of the remaining pupils for modest employment when they leave school. Effort is made to find employment for the pupils after school hours, on Saturday, and during vacations. So far as possible, these pupils mingle freely with others in extra-curriculum clubs and similar activities, and an attempt is made to keep them from experiencing humiliation. An observer wishes that administrative arrangements could be adjusted so that each of the retarded pupils might be a member in full standing of at least one regular academic class of his approximate grade, quite without regard to academic standards if necessary.

Co-operation between school and home.—Quite typical of the many-sided endeavor made by this school to elicit the support of the children's homes are the letters of congratulation addressed to pupils who have done commendable work. The pupils are expected to take these letters to their parents.

WALTER H. FRENCH JUNIOR HIGH SCHOOL

Date _____

_____, we congratulate you upon your excellent school record for the past semester. Not only are you establishing habits which will give you mastery over life-situations, but you are building into the traditions of this school ideals of character and scholarship which are of enduring worth.

Your contribution to the achievement of the purposes of the French Junior High School has earned for you its official emblem, which we trust you may wear always with honor to yourself and credit to the school.

Sincerely,

Teacher_____
Principal

If a pupil has failed to do his best, his parents receive directly from the principal a communication which indicates the joint responsibility of school and home.

WALTER H. FRENCH JUNIOR HIGH SCHOOL

Lansing, Michigan _____

This is to call your attention to the failure of _____
in the following subjects at the last marking period:

In our opinion, this failure is unnecessary and can be retrieved by faithful study. We assure you that teachers are ever ready to render special help and encouragement. However, this can be done effectively only when the pupil has a sincere desire to do his part. We trust that we may have your co-operation.

Principal

Co-operation between home and school takes several other forms. Major problems of discipline are frequently solved by conferences at the school office, or sometimes in the homes, attended by the principal, the parents, the pupil, and the teacher. Such procedure is especially potent in prevention of action which requires discipline; in fact, punishment is always subordinated to prevention. Teachers visit the homes of their pupils. Principal J. W. Slaughter estimates that no fewer than one hundred such visits were made last year. Moreover, parents appear to appreciate the constant cordial invitations to visit the school. One evening meeting last year, particu-

larly unusual and deserving to be copied by any junior high school, enabled each parent to follow his child's daily schedule. During ten-minute class periods each teacher introduced himself and his subject and outlined his work briefly. Thus, parents learned where their children were and what they were doing each hour of the day. Another home-and-school co-operative device is the weekly school "movie," held every Thursday after school, for which the children pay five cents; parents are admitted free. The latter attend in considerable numbers. A committee of teachers selects the films with the utmost care, endeavoring to combine educational value with immediate interest. Last year, among others, the following pictures were shown: Dealing with American history: "Columbus," "James-town," "The Mayflower," "The Pilgrims," "Vincennes," and "The Frontier Woman"; dealing with literary subjects: "The Three Musketeers," "Peter Pan," "Beau Geste," "Evangeline," and "Old Scrooge"; of major social import: "The Heart of Lincoln," "Yankee Clipper," "Rough Riders," and "Finding His Job." Thus, special effort is made to select films that either round out curricular interests or commemorate appropriately outstanding dates and seasons—for example, "Rough Riders" for Roosevelt Day, "Barbed Wire" for Armistice Day, and "Old Scrooge" for Christmas. The teachers' committee in charge of this activity reports that the most painstaking care must be exercised in the selection of films. Apparently the recommendations of some salesmen are quite unreliable. The committee's opinion is that few commercial films today are suitable for use in schools.

Another element of co-operation is the joint participation of the school and the homes in the solution of many community problems—charitable, protective, political. For example, during the month of October, 1928, a contest between the home rooms endeavored to secure wider registration of voters for the November election. Each home room which succeeded in attaining the registration of 85 per cent of the parents of the pupils was awarded a certificate of honor. During the same month a fire-prevention drive throughout the community was initiated and engineered by the school through its pupils. At Christmas each home room furnishes a basket for one unfortunate family; the name of the family is never revealed. In addi-

tion to these major provisions for school and home co-operation are frequent home-room and auditorium entertainments for parents and an annual Mothers' Day performance, growing into a tradition under the direction of the boys' Hi-Y organization. This year the writer witnessed a rehearsal of a romantic musical comedy, "The Gypsy Rover," with excellently trained soloists and pleasing choruses. This entertainment was being prepared for public performance by the special music class. The proceeds were to be used to buy instruments for the school band. In brief, this junior high school is doing far better than merely "to continue the influence of the home," too often accepted as a function of the school. Frequently the school needs to offset certain home influences, and almost always it needs to guide the home into suitable co-operation with the endeavors of the school. A vigorous and enthusiastic parent-teacher association frequently brings parents and teachers together in friendly gatherings; most of the programs have to do with the purposes and the practices of their own junior high school. The writer is inclined to think that the state school officers recommended the Walter H. French Junior High School primarily because of its outstanding experiments in the direction of school and home co-operation.

Educational and vocational guidance.—As indicated, the Walter H. French Junior High School is making one radical modification of usual procedure by stressing lightly the too frequently over-formalized ability grouping. It is to be hoped that many other junior high schools are paralleling this school in its commendable endeavor to provide individualization in ways other than by ability grouping. Another, even more highly desirable, change needed in intermediate-school theory and practice is represented in the French Junior High School by a shift in emphasis from trade training as such to vocational guidance and enlightenment. More specifically, the desirable modification may be called a change from vocational training to educational guidance as an avowed purpose of the intermediate school.

Comment has already been made concerning the fundamental fact that in Lansing any junior high school graduate can enter any one of the three specialized curriculums of the senior high schools. This means that the three junior high schools are not over-special-

izing education for adolescent pupils. On the contrary, abundant evidence of true educational guidance is observable in the procedures of many classrooms, especially in the manual arts and domestic science. Throughout all such work the emphasis is placed on general experience in the nature of tryouts. The manual-arts shops give boys abundant practical experience with woodwork, metal-work, and electrical work, but nowhere is vocational training the primary objective; the objective is practical experience and vocational outlook. The work is decidedly prevocational, as it should be.

Vocational information is not neglected, however. A semester course, "Occupations," required in Grade IX B as Social Studies V, gives pupils an overview of industrial possibilities with special reference to Lansing and southern Michigan. Each pupil selects an occupation for individual investigation under guidance and, if possible, consults workers in the field selected. A limited number of pupils receive practical training within the school itself as office assistants, library workers, and employees in the cafeteria. A standing faculty committee guides pupils into suitable employment during vacations. More than one hundred boys and girls cultivated home gardens in the spring of 1928, receiving school credit if they met definite standards regarding size of garden space, preparation and fertilization of the soil, planting, and tillage and made accurate reports of expenses and income. The gardens were inspected regularly by instructors in the science department.

To one line of training closely related to vocational guidance, the Walter H. French Junior High School, competing zealously with the other intermediate schools of Lansing, pays systematic attention. Banking, universal throughout all the home rooms, is under the general supervision of one teacher. All banking business is done during the opening period on Tuesday. Each home room elects a banker and assistants, who make all entries in pass books, fill applications for new pass books, and issue withdrawal certificates. All the home-room bankers meet once a week as the Bankers' Organization. Interest is maintained by competition and rewards. The pupils in a room ranking 100 per cent in banking are rewarded with individual buttons and a placard to place at their door. Bar graphs in the lower hall indicate the ranking of competing rooms and the

ranking of the school as compared with the two other junior high schools. The total amounts saved monthly by all the pupils range from \$110 as the minimum to \$160 as the maximum.

The Walter H. French Junior High School has no official vocational adviser; pupils, however, consult the teacher whose experience lies in the field of their interests or whose personality matches their moods. Home-room teachers are selected with special reference to their ability, desire, and willingness to act as educational and vocational advisers. Naturally, since a pupil has a single home-room teacher for three years, intimate acquaintance and lasting friendship often develop. Teachers of academic subjects are freely consulted by pupils; gymnasium, manual-training, and fine-arts instructors are called upon frequently for advice. The special teachers encourage perhaps 20 per cent of the pupils who consult them to continue in the particular lines of work as possible vocational careers. Pupils of junior high school age do not willingly narrow their choice to one practical occupation nor even to a group of allied occupations; moreover, choices that are made are generally quite tentative, as they should be. The occupational choice of a fifteen-year-old child is of very doubtful value. As has been indicated, the principal advisory service of the school is in the choice of the senior high school curriculum—academic, commercial, or industrial—and of the specific occupation in the industrial curriculum. In a small percentage of cases teachers and parents confer informally regarding the child's vocational or educational plans.

The director of the senior high school industrial curriculum is the adviser of the boys in that department and, to a limited extent, of the junior high school boys desiring to enrol in that curriculum. Practical experience in certain non-professional occupations or trades in Lansing may be gained in connection with the senior high school industrial curriculum provided a craftsman in the particular occupation or trade will assume the supervision of the boy in his shop during alternate weeks.

Honor awards.—Nowhere has the writer witnessed such determined, persistent, and apparently effective pressure for good scholarship as is evident, almost objectionably prominent, throughout the Walter H. French Junior High School. If public recognition, prizes,

places on honor rolls, and various other awards are really efficacious in promoting scholarship, the attainments of the pupils in this school ought to be decidedly superior. The close of each "marking period" finds the more successful pupils on the A, B, and "home-room" honor rolls. Each scholastic mark of A counts 4 points; B, 3; C, 2; and D, 1. A pupil who has twenty-one points is on the A honor roll; a pupil who has from seventeen to twenty points is on the B honor roll; and a pupil having sixteen points is on the home-room honor roll.

Seemingly more commendable are the rewards for excellence in scholarship, citizenship, and athletic and non-athletic activities.

TABLE I
NUMBER OF POINTS IN SCHOLARSHIP, CITIZENSHIP, AND
EXTRA-CURRICULUM ACTIVITIES REQUIRED FOR
BRONZE, SILVER, AND GOLD PINS

	Bronze Pin	Silver Pin	Gold Pin
Scholarship.....	70	80	90
Citizenship.....	80	85	90
Extra-curriculum activities.....	30	40	50
Excess.....	35	30	25
Total.....	215	235	255

Honor pins—gold, silver, or bronze—are awarded on a point system at the end of each semester to pupils who have ranked high in all three branches of school activity. The number of points required for the three pins is shown in Table I. It will be seen that the sum of the scholarship, citizenship, and extra-curriculum points does not equal the total number of points required for the respective pins. Additional points must be gained in some or all of the lines. Some pupils attain their additional points in one field and some in another. A pin awarded to a pupil remains the property of the pupil so long as he maintains the standards represented by that pin. On leaving school, a pupil keeps the last honor pin he has won. Each semester a gold medal is given to a IX A boy by an organization of citizens interested in character-training. An observer is somewhat oppressed by the obvious use of rewards for excellence; he recalls modern criticisms of punishments and rewards as elements of "con-

trol." However, the testimony of the school officers is that few pupils are unduly exalted by continued success and that few are humiliated by habitual failure. Moreover, any inclination to question the wisdom of highly stressed rewards is more than offset by the recognition of the intelligent efforts, everywhere observable, to make the pupils conscious participants in school discipline.

The school community.—The entire school is organized for practical training in citizenship under the name "Walter H. French Junior School Community." A printed constitution outlines the rights and duties of citizens. The governing body, known as the council, is composed of twenty-three pupils, one representative being elected by each of the twenty-three home rooms. Candidates for this office must have suitable scholastic standing and a reputation for initiative, punctuality, leadership, and kindred qualifications. The president of the council is elected each semester by the student body. Other officers are elected by the council itself. The council holds regular meetings monthly and special meetings at the call of the president or the principal. In addition to general administrative powers in dealing with ordinary conduct on the school premises, the council may exercise judicial powers in matters submitted by the principal.

The home rooms have their own organizations; they elect officers, who may be "recalled" by the citizens if they fall below definite eligibility qualifications or whenever, in the opinion of the majority of the home-room constituency, the best interests of the school demand such action. The Board of Traffic Officers, made up of two pupils from each room, regulates passing in the halls under the supervision of a faculty adviser. Altogether too infrequently does a visitor within a school building observe such informal, unstilted yet courteous behavior as he sees in the corridors of the French Junior High School during the intermission periods. Somewhat like the traffic force within the building is the Safety Patrol, which functions at street crossings near the building under the direction of a regular police officer of the city. Two divisions of the Safety Patrol are on duty, one in the morning and one in the afternoon, each under its own captain. The officers wear Sam Brown belts. At the busiest crossings they operate warning flags, allowing pupils to pass when

the street is clear but not attempting to regulate traffic. To promote this work, similarly carried on in all the Lansing schools, a cup is awarded by the superintendent's office each month to the school having the best record.

School discipline.—The traffic squad is perhaps the most conspicuous element of the school discipline which aims to make each individual, each home room, and the student body as a whole participants in the regulation of their own ethical and social conduct. In the local governmental units, the home rooms, are solved most of the disciplinary problems. In some home rooms the presidents warn or correct petty offenders and bring more serious offenses to the attention of the home rooms sitting as committees of the whole, a procedure which occurs during the opening period each day. In a few of the home rooms, officers are assisted by "courts," the judges being elected by the pupils. Other home rooms depend on temporary "committees," elected by pupils and teacher, when major disciplinary action is required. In all cases a faculty member is the ultimate disciplinary officer; except in rare instances, he executes the recommendations of the pupil representatives. Even the individual classes have their presidents and secretaries, who assume responsibility in the absence of the instructors. One is reminded of the senior high school at Holland, Michigan, which, it is reported, never has a faculty officer in the assembly hall seating 550 pupils; the pupils in this school conducted their classes one entire day with no faculty representative in the building. It is to be hoped that the examples of the Holland Senior High School and the Walter H. French Junior High School are representative of practices throughout Michigan. Certainly they supply convincing evidence that a school may be a laboratory in representative government and in practical citizenship. These schools are exercising skilfully "the engineering function of the school"; they manipulate pupil activities and environmental conditions so that "control" or "discipline" is a part of the conscious experience of the participating pupils.

Citizenship standards.—As evidence of the best promotive work in the Walter H. French Junior High School may be cited the following list of items considered for a final rating in "citizenship." Ten points are allotted for each of the ten qualifications.

1. Courtesy: Courteous to all (young and old and strangers in the building). Gives fine attention in class.
2. Thrift: Does not waste own time or the time of others. Takes splendid care of books. Banks regularly and practices thrift.
3. Co-operation: At all times helps when possible for the best interests of the school. Works diligently wherever placed.
4. Leadership: Promotes team work. Recognizes and accepts responsibility.
5. Loyalty: True to the school, discourages knocking, joins and boosts all school activities, encourages proper conduct in and out of school.
6. Honesty: Fair play, always truthful.
7. Punctuality: On time at school, classes, and organizations.
8. Clean-mindedness: Clean in body and thought. Stands for high ideals.
9. Civic pride: Respect and pride of school at all times. Keeps lockers and rooms clean, avoids running or crowding in halls or on stairs. At all times has the first thought for the school.
10. Obedience: Obedient at all times.

The Walter H. French Junior High School appears to exemplify clearly four departures from the practices of intermediate schools of ten years ago. First, the curriculum is essentially an enrichment of the "integrating" studies, accompanied by ample provisions for special interests in the nature of tryout courses. Vocational experience and information are kept to the fore at the expense of trade training. Second, no great stress is laid on any purely administrative schemes or devices. Attention to individual needs is admirably accomplished in several clearly marked ways; no energy is expended in elaborate machinery for formal testing or ability grouping. The opportunity room is the only example of conspicuous organization for differentiated instruction. The avocational clubs and kindred activities are properly placed with reference to this idea of individualization. Third, and perhaps most successfully executed, is the home and school co-operation; this is a series of relationships that are unquestionably doing much actually to educate the parents and to acquaint them with modern educational practices, which are vastly different from the procedures of their own childhood. Fourth, and in the place of climax, the school itself is a laboratory of citizenship, not unlike a democracy, in which each member has rights and duties. Under the guidance of their teachers, the children of this group maintain efficiently and with justifiable pride the Walter H. French Junior School Community.

TRENDS IN COLLEGE-ENTRANCE OFFERINGS

F. A. BALYEAT
University of Oklahoma

The high-school subjects that best fit one to succeed in the college of today have not been determined and probably will not soon be known. The work that is being accepted for college entrance today, however, makes an interesting contrast with that accepted a decade and two decades ago. This article presents data with regard to the situation at the University of Oklahoma.

The Freshmen who entered the University in the first semester of 1907, 1917, and 1927 are included in the comparison. Only those who graduated from public high schools in Oklahoma and entered without advanced standing are considered. With these limitations, it is fairly safe to assume that the students included in this study graduated from public high schools in Oklahoma the same year that they entered the University.

The data were gathered from the files of the University registrar. In many instances only the school from which the entrant graduated is indicated in the files even though many of the students attended more than one high school. However, since the majority of these students moved from one Oklahoma high school to another, the offering of credits earned in more than one school does not affect the significance of the comparisons.

In the class of 1907 there were 21 men and 5 women who graduated from public high schools in Oklahoma and entered the University of Oklahoma without advanced standing; in the class of 1917 there were 217 men and 142 women; and in the class of 1927 there were 650 men and 292 women. A higher percentage of women than of men enter the University with advanced standing from junior colleges or normal schools; hence the number of women is relatively small. In each of the three years the Freshman class exceeded the total shown here, but the other students did not conform to the classification.

Tables I, II, III, IV, and V show the percentage of students in each class who were given various amounts of college-entrance credit in languages, social studies, mathematics, science, and vocational and miscellaneous subjects. The term "unit" is used with the mean-

TABLE I*

PERCENTAGE OF ENTRANTS IN 1907, 1917, AND 1927 WHO
WERE GIVEN VARIOUS AMOUNTS OF COLLEGE-
ENTRANCE CREDIT IN LANGUAGES

Subject	1907	1917	1927
English, 4 units.....	77	74	73
Latin:			
4 units.....	37	10	4
3 units.....	11	13	5
2 units.....	42	53	39
1 unit.....	7	7	6
Spanish:			
2 or more units.....	0	3	34
1 unit.....	0	6	7
French.....	0	2	7
German.....	4	36	1
Foreign language, 4 or more units.....	38	26	13
No foreign language.....	4	5	15

* This table is to be read as follows: In 1907, 77 per cent of the entrants presented 4 units of English; in 1917, 74 per cent; in 1927, 73 per cent.

TABLE II

PERCENTAGE OF ENTRANTS IN 1907, 1917, AND 1927 WHO
WERE GIVEN VARIOUS AMOUNTS OF COLLEGE-
ENTRANCE CREDIT IN THE SOCIAL STUDIES

Subject	1907	1917	1927
History:			
4 units.....	4	10	15
3 units.....	20	33	41
2 units.....	70	45	28
Other social studies:			
2 units.....	0	0	1
1 unit.....	11	17	37
½ unit.....	69	42	30

ing generally attached to it; fifteen units are required for entrance to the University, and sixteen units are required for graduation from Oklahoma high schools.

In nearly every case the four units of English accepted for college entrance included two units which were mainly composition

with some attention to the classics and one unit each of American literature and English literature with minor attention to composition. Other types of English are not included in Table I.

The women show a greater tendency than do the men to present credit in foreign languages. In 1907 all the women entered with some

TABLE III
PERCENTAGE OF ENTRANTS IN 1907, 1917, AND 1927 WHO
WERE GIVEN VARIOUS AMOUNTS OF COLLEGE-
ENTRANCE CREDIT IN MATHEMATICS

Subject	1907	1917	1927
Algebra:			
2 units.....	4	1	6
1½ units.....	84	64	38
1 unit.....	12	35	56
Plane geometry.....	100	100	97
Solid geometry.....	77	39	16
Trigonometry.....	4	11	10

TABLE IV
PERCENTAGE OF ENTRANTS IN 1907, 1917, AND 1927 WHO
WERE GIVEN VARIOUS AMOUNTS OF COLLEGE-
ENTRANCE CREDIT IN SCIENCE

Subject	1907	1917	1927
Physics.....	88	70	32
Chemistry.....	15	20	23
Physical geography.....	80	65	32
Botany.....	61	32	32
Zoölogy.....	23	19	28
Physiology.....	46	9	19
General science.....	0	8	50
Science:			
3 or more units.....	31	12	6
2 units.....	50	33	22

such credit; in 1917, 99 per cent; and in 1927, 92 per cent. Also, among those presenting four or more units of some foreign language, the women predominate. The only exception to this tendency is found in the case of the students entering in 1917; 36 per cent of the men in this class and 35 per cent of the women offered German. This situation is offset by the higher percentage of women who had studied Latin.

A legislative act of 1921 requires one unit of American history

and government for high-school graduation. On the high-school transcripts this is usually listed as American history; it accounts in part for the large percentage of students in 1927 who offered four units of history. Included in "Other social studies" are civics, economics, and psychology. Commercial geography should be so counted, but the University catalogue classifies it under "Vocational and miscellaneous." Sociology and problems in democracy, now rather generally taught in Oklahoma, did not appear in the first two

TABLE V
PERCENTAGE OF ENTRANTS IN 1907, 1917, AND 1927 WHO WERE
GIVEN VARIOUS AMOUNTS OF COLLEGE-ENTRANCE CREDIT
IN VOCATIONAL AND MISCELLANEOUS SUBJECTS

Subject	1907	1917	1927
Home economics (women) and manual training (men):			
2 or more units.....	0	4	19
1 or $1\frac{1}{2}$ units.....	0	43	31
Agriculture.....	0	27	26
Commercial law.....	0	10	23
Commercial geography.....	0	10	23
Stenography:			
2 units.....	0	0	5
1 unit.....	0	4	23
$\frac{1}{2}$ unit.....	0	1	9
Business arithmetic.....	0	22	28
Bookkeeping.....	0	13	19
Vocational English.....	0	0	34
Music.....	0	2	21

classes and were found too infrequently in the class of 1927 to be listed as such on the registrar's cards.

Commercial arithmetic is not included in Table III. Some high schools offer trigonometry instead of solid geometry, while some of the larger high schools offer both. The College of Fine Arts, one of the larger units of the University, does not require geometry for entrance, and increasingly more of the women do not include that subject in their high-school work.

Agriculture is not included in Table IV. Geology, rather infrequently offered, has probably been recorded as physical geography. Biology, now frequently taught as such, is listed under botany and zoölogy. Several years ago physics and physical geography were commonly required high-school subjects because of the few electives;

their high frequency in the earlier years is therefore not surprising. Furthermore, these two subjects, as well as the other sciences, were often taught with very little laboratory equipment. The more rigid standards of accrediting in recent years have made it impossible for many small high schools to teach the subjects which require expensive laboratory material. This fact accounts in part for the decrease in the total amount of science offered for college entrance.

In 1927, 40 per cent of the men and 15 per cent of the women had studied physics. The percentages of men and women who had studied the other sciences are more nearly equal. The fact that 20 per cent of the women in 1927 offered credit in chemistry is explained by the increase in high-school household chemistry and the part that chemistry plays in college courses in home economics. In 1927, 53 per cent of the men and 43 per cent of the women had credit in general science.

A striking feature of Table V is the amount of entrance credit presented in home economics and manual training. The amount is more than is shown in this table because the men who had credit in home economics and the women who had credit in manual training were unfortunately not included in the tabulation. In 1927, 46 per cent of the men had credit in manual training, and 60 per cent of the women had credit in home economics.

Many entrants in 1917 who had credit in agriculture had studied the subject as a part of the teacher-training course, then prominent in Oklahoma high schools but now neither present nor needed. In 1927, 18 per cent of the women had credit in agriculture, most of them having taken the subject to satisfy the constitutional requirement for state teachers' certificates. The 29 per cent of the men in 1927 who had credit in agriculture included many who had studied the subject as Smith-Hughes work.

Vocational English includes public speaking, dramatics, debate, journalism, and business English. One-third of the students entering in 1927 had credit in these subjects, and more than two-fifths of these students had as much as a whole unit.

In both the 1917 and the 1927 groups the men lead in the percentage having credit in stenography (shorthand and typewriting). In 1927, 41 per cent of the men and 31 per cent of the women had

such credit. In both groups the men lead with respect to bookkeeping. In both groups the percentage of men with credit in business arithmetic is nearly twice the corresponding percentage of women.

The University accepts credit for both vocal and instrumental music provided the teacher holds a state music certificate. For college entrance, one-half of such credit must be in the theory of music. It is interesting to note that in 1927, 18 per cent of the men and 27 per cent of the women had credit in music.

TABLE VI
AVERAGE NUMBER OF UNITS OFFERED IN EACH SUBJECT
IN 1907, 1917, AND 1927*

Subject	1907	1917	1927
English.....	3.7	3.2	3.7
Latin.....	2.7	2.0	1.1
Spanish.....	0.0	0.0	0.8
French.....	0.0	†	0.1
German.....	0.1	0.6	†
History.....	2.5	2.6	2.7
Other social studies.....	0.4	0.4	0.7
Algebra.....	1.5	1.3	1.3
Geometry.....	1.3	1.2	1.1
Trigonometry.....	0.0	†	0.5
Sciences (the seven in Table IV).....	2.4	1.8	1.6
Home economics (women).....	0.0	0.5	0.9
Manual training (men).....	0.0	0.5	0.7
Business (commercial law, stenography, business arithmetic, and bookkeeping).....	0.0	0.2	0.8
Vocational and miscellaneous subjects.....	0.0	0.96	2.32

* Except in the last line, the second decimal is disregarded unless it is 5 or more, when the first decimal is increased by one.

† Less than one-tenth of a unit.

Table VI shows the average number of units offered in each subject by the students entering in 1907, 1917, and 1927. Not more than four units in vocational and miscellaneous subjects are allowed by the University. The average amount of credit in the ten vocational and miscellaneous subjects combined increased from nothing in 1907 to nearly a unit in 1917 and to two and one-third units in 1927. The amount of credit in these subjects in 1927 was practically the same for the two sexes. These ten subjects, together with Spanish, French, and general science, none of which was offered in 1907, made up one-fourth of the offering of the students entering in 1927.

EVALUATION OF TEACHER TRAITS BY VACATION-SCHOOL PUPILS

W. J. KLOPP¹

Woodrow Wilson High School, Long Beach, California

Eighty-one cadet teachers were assigned to as many classes in the junior and senior high schools of Los Angeles during the summer session of 1928. An expert teacher serving as critic was in charge of each class. The cadet teacher was given an opportunity to make his adjustment to the new situation and to plan the work of the course for the entire period of the session before he was expected to take charge of the class. In most instances the pupils were informed that the assistant to the regular teacher was there to learn the art of teaching, and in not a few cases the pupils made a special effort to assist the cadet. It was evident that the pupils were in school for serious work and consequently expected the class work to proceed without interruption.

Whether it was the presence or the absence of some dominant teacher traits that suggested teacher-rating to the pupils, the writer could not ascertain, but there were a number of classes that desired to rate their teachers. The pupils selected the following traits as a basis for rating: kindness, fairness, neatness, sense of humor, thoroughness, willingness to help, discipline, enthusiasm, approachability, and patience.

The pupils were requested to place a plus sign in front of the trait if they thought that the cadet teacher should be rated as high on that trait as the best teacher they could remember and a check mark if the cadet teacher should be rated below their ideal teacher. The results shown in Table I indicate a serious lack of desirable characteristics in young college graduates who enter the teaching profession. Especially appalling is the fact that these cadet teachers were rated low in fairness, kindness, and patience, traits which

¹ Mr. Klopp was director of teacher-training in the Los Angeles vacation schools in the summer of 1928.—EDITOR

should have been developed long before they arrived at the stage of building character.

The pupils were asked to "give constructive criticisms on the nature and character of teaching by your cadet teacher." The pupils had very definite ideas concerning good and bad teaching, as indicated by their frank replies. The following statements show the nature of their criticisms.

During the past week your teaching has improved, or rather your attitude. When you took over the class, you were too ambitious; you lacked the personal, human trait. . . . Another thing, you make me nervous by walking around the room all the time. Why don't you ever light?

You could improve teaching by smaller assignments and by not expecting so much cheating and talking so much about it. . . . I felt like cheating myself when you talked so much about it.

TABLE I

Trait	Percentage of Pupils Rating Cadet Teachers Equal to Ideal Teachers	Percentage of Pupils Rating Cadet Teachers below Ideal Teachers
Kindness.....	67	33
Fairness.....	60	40
Neatness.....	56	44
Sense of humor.....	62	38
Thoroughness.....	45	55
Willingness to help.....	78	22
Discipline.....	38	62
Enthusiasm.....	69	31
Approachableness.....	62	38
Patience.....	61	39

Your personal remarks about the pupils hurt their feelings.

Too many tests and not enough class discussions.

Your conspicuous notes before us detracted from the teaching.

Don't joke and make people laugh during examinations for this interferes with those trying to make recommended grades. Explain points that are not quite clear by examples.

More discussions on topics.

Your tests were too complicated. . . . Short questions would have been better.

I think a teacher should not burn one up so much.

I think a teacher should talk to the class, not to just one person. I admire your intellect. . . . You can make quick decisions and are very considerate of the pupils.

Many of the criticisms contained the statement, "Do not walk around the room so much." Many pupils referred to too many tests and not enough class discussions. The writer wonders whether the average teacher makes an effort to capitalize this critical interest of his pupils.

Some of the outstanding weaknesses observed by the children might be summarized as follows:

1. Teachers are too much in evidence during the class period.
2. Teachers fail to capitalize the opinions, knowledge, and interest of pupils as related to definite assignments.
3. Teachers lack the child point of view in making assignments.
4. Teachers are too frequently impatient when pupils are making responses to questions and interrupt with their more mature responses.
5. The teacher superimposes her mature experience on the thinking child before the child has an opportunity to frame a response in the light of his own limited experience.
6. The teacher frequently is unprepared to enrich the pupils' responses to specific phases of the assignment.
7. The teacher is often unfair in her estimate of the pupils' ability to succeed in the assigned work. Her tests are often too invalid and lack comprehensiveness.
8. Teachers are lacking in sympathy, especially in the case of timid children or children suffering from a fear complex.
9. The teacher lacks that personality which stimulates effort and promotes dynamic application on the part of the pupil.
10. The teacher lacks vitality and power to sustain application and interest.

CORRELATING THE HIGH SCHOOL AND THE COMMUNITY

PAUL C. MINER

Superintendent of Schools, Lyman, Wyoming

This article reports an experiment in community organization which began in 1923 in an effort to make the high school in Lyman, Wyoming, a center for the social life of the region in which the school is situated. The experiment has been in operation long enough so that its success is assured. The range of community activities which have been affected is much broader than that at first contemplated.

Lyman is eleven miles from the railroad and has approximately seven hundred inhabitants. It is located on the Lincoln Highway in the Bridger Valley in southwestern Wyoming. Its elevation is about 6,000 feet; the winters are therefore cold, and the growing season is short. The Bridger Valley is about twenty miles long and ten miles wide and has a sparse population centered in three communities—Lyman, Mountain View, and Fort Bridger.

The experiment was an outgrowth of the desire to provide for the education of both the older generation and the pupils in the school. It was suggested that a farmers' and housekeepers' conference be held. This conference was to be carefully planned so as to bring before the people the larger aims and possibilities of education and to put them in touch with the opportunities which a wholesome community organization can provide.

It was evident that, if the plan was to be a success, it must be organized as a community enterprise. The people must assume responsibility in order to stimulate general interest in its success. Therefore, the leaders of all the different social organizations were called together, and the plan was placed before them for their consideration.

At first many of those attending the meeting thought that it was too pretentious an undertaking and that it would be impossible to bring together the specialists necessary to insure the success of the

venture. Even the county agriculture agent made the statement that it would be unwise to ask such speakers as were suggested to address such small audiences as could be assembled. However, after a long discussion it was decided to launch the undertaking. A committee on the "Farmers' Round-up and Housekeepers' Conference" was appointed. The superintendent of schools was selected as chairman, with the Smith-Hughes agriculture teacher, the president of the school board, and three of the best and most progressive business men in the community as his aids. The program was to occupy three days.

It was decided to invite the leaders of the state and of the adjoining state to be present. As a result, the following were asked to take part: A. G. Crane, president of the University of Wyoming; John A. Hill, dean of the College of Agriculture, University of Wyoming; A. E. Bowman, director of the Extension Department, University of Wyoming; Dr. G. M. Anderson, head of the Wyoming State Board of Health; John A. Widsoe, former president of the Agricultural College of Utah and president of the University of Utah; W. Arthur Ross, of the Wyoming State Department of Public Instruction; Attorney N. E. Corthell, representative of the Wyoming State Farm Bureau; Mary Rokahr, head of the home extension work at the University of Wyoming; and Olga M. Hoesly, of the Wyoming State Department of Public Instruction. The Ogden Stockyards was invited to send a representative to give the farmers a demonstration on the selection and grading of beef cattle for market. All accepted the invitation and expressed a willingness and a desire to co-operate in the undertaking.

With the program outlined and the speakers secured, the committee was confronted with the problem of getting an audience large enough to justify the coming to Lyman of the group of prominent educators. The problem confronting the committee was to reach every man and woman in the valley and to bring together as many as possible.

The co-operation of every organization was secured. The newspaper gave hearty support through editorials and news items. Many personal visits to the farmers were made by interested workers. As a final reminder, the following letter was sent to every household.

DEAR FRIEND:

We, the committee of the Farmers' Round-up and Housekeepers' Conference, hereby extend to you a special invitation to be present at all the sessions. We feel that the occasion justifies the presence of every resident of our valley and offers an opportunity that you, as a progressive citizen, cannot afford to miss. We therefore urge and sincerely hope that you will formulate your plans and preparations so that you can be with us all three days.

With these ideas in mind, we are inclosing herewith a complete program, and we shall anticipate your presence and shall look for you.

Yours for a bigger and better valley,

THE ROUND-UP COMMITTEE

As a result of these efforts, every family in the valley was represented in the attendance, and the place of meeting was filled to capacity practically every session.

The program included music by the school band and orchestra and by other musicians. The addresses were on such subjects as "Present Agricultural Outlook," "Making Home Work Enjoyable," "Rural Health Problems," and "Improving Conditions in Uinta County."

Those who attended the sessions were enthusiastic and passed resolutions asking that the round-up be made an annual affair. Evidence of the success of the conference is supplied by the following paragraphs, which appeared in the *Laramie Republican*, one of the leading newspapers in Wyoming.

LYMAN ROUND-UP

There was a time when the county fair was merely a county affair, strictly local in its appeal, rarely attracting the serious attention of the serious-minded outside the county, and not too seriously regarded in the county itself. Horse racing took precedence over horse-judging, and a good time was more important than record yields or blue-ribbon stock.

But all that was before the evolution of the county fair into the "Farmers' Round-up and Housekeepers' Conference." That the once backward business of farming has taken a mighty stride forward in the departments of both tilled field and farmhouse is strikingly indicated in the caliber of men—and women—gathering today at Lyman, Wyoming, for the first farmers' round-up and housekeepers' conference ever held in the state, a three-day affair intended to keep the farmer and the farmwife abreast of the times, if not a bit in advance of them. . . .

The innovation, this glorified county fair, should prove, it is generally held, of inestimable benefit to the community that conceived it if enterprise, intercourse, and the caliber of the speakers count.

It was recognized by the committee which organized the round-up that, if the community was to secure any definite results from the undertaking, a well-planned program should be adopted which would help to build up the community and would lead the people of the community to have confidence in the development of their industries.

After careful consideration, it was decided that the valley was most in need of some form of industry that would give the farmers more ready money. Conditions were carefully studied, and the poultry industry was decided on as the first project. It was realized, however, that the farmers at that particular time had no money with which to enter this industry.

In order to get the industry started, the banker, who was a member of the committee, said that the bank would advance the money necessary for the baby chicks to all its patrons who desired to enter the poultry industry and allow them to pay back the money when they sold the cockerels in the autumn. He stipulated, however, that the farmers would have to build proper chicken houses, approved by the teacher of vocational agriculture in the high school. This, of course, demanded another cash outlay on the part of the farmer which he could not manage. The manager of the lumber company, who also was a member of the committee, said that his company would supply the lumber for the chicken houses and that the farmers could pay for it from the returns from the eggs sold during the following winter. Both the bank and the lumber company agreed to charge the lowest rate of interest possible, as their idea was to build up an industry for the community. This plan made it possible for any farmer of good standing to enter the poultry industry with practically no immediate cash outlay.

The farmers realized that they were not prepared to enter the poultry industry on this scale without proper and adequate training. The high school immediately volunteered to conduct evening classes in poultry-raising for all who desired to enrol. As a result, a six-week course was given on the problems of poultry-raising to a class of about forty farmers and their wives. Twenty thousand baby chicks were ordered for spring delivery.

The same plan has been followed for five years; twenty thousand chicks were ordered the first year; forty thousand, the second year; and sixty thousand, the third, fourth, and fifth years.

Five years ago eggs were brought into the valley. Today the poultry industry is bringing in more than six thousand dollars a month to the community. A co-operative poultry association now markets all the eggs and poultry in the valley and furnishes all necessary feeds and supplies to the farmers at cost. All meetings of this organization are held in the rooms of the agriculture department of the high school, and the teacher of vocational agriculture is an ex-officio member of the board of directors.

While discussing some of the problems confronting the community, the Lyman Boosters' Club, which is an outgrowth of the round-up, was shown the inadequacy of the housing facilities of the high school. The club immediately appointed a committee to make a careful investigation and report at the next meeting. As a result of the report, it was decided that the Club would sponsor the campaign for a new and modern high-school building and have it ready for the next round-up.

The building campaign was started in March; the bond-issue program was carried with very few dissenting votes; and by the next November one of the finest rural high school buildings in the state of Wyoming was ready for dedication. The dedication of this building was made the main feature of the Second Farmers' Round-up and Housekeepers' Conference.

When the directors met for the purpose of arranging the program for the second round-up, it was suggested that the walks connecting the high-school building with the rest of the city ought to be paved. Some felt that the lack of paving indicated a lack of community pride and industry. At the close of the meeting two carloads of cement were ordered, and within four weeks, through co-operation and donated work, paved walks were laid across the main streets in three places and for the length of two city blocks leading to the high-school building.

The Second Farmers' Round-up and Housekeepers' Conference was an even greater success than was the first. The attendance was larger; some of those attending traveled as much as fifty miles and remained all three days. The important meetings were held in the high-school building, and the interest of the whole valley was centered on education.

How this round-up was viewed by other cities in the state may be seen from the following quotation from the issue of the *Evanston Booster*, Evanston, Wyoming, for April 3, 1925.

I have before me a copy of the *Brider Valley Enterprise* wherein is given a partial account of a "round-up" held at Lyman during the last week of November, 1924. The principal feature of the occasion seems to have been the dedication of the new high school. We note that there were in attendance at this service prominent and noted educators from the University of Wyoming and from the state of Utah. . . .

Just think of a little town of approximately seven hundred people situated fifteen miles from the railroad being able to get such a corps of eminent men and women educators, at one time, to go to their little town to take part in their school services. Think what an array of big men they had there. They also provided, free of cost, meals and entertainment for all who visited their town during this round-up. How could they do it? How is it that the small Bridger Valley can every year have a splendid fair? The answer is very obvious. Unity: in unity there is strength. United in a common cause. All pulling together (not apart) to accomplish a definite program. These people are united.

The annual banquet of the Lyman Boosters' Club¹ is held as a feature of the round-up. This banquet is planned, cooked, and served by the girls of the home economics department of the Lyman High School. The speakers are the outstanding lecturers of the round-up. At one banquet the main speaker was the first woman governor in the United States, Nellie Tayloe Ross. Plates are usually laid for one hundred people; the attendance is limited to members of the Club and their partners.

The third round-up was considered by the governor of the state to be so important that she was in attendance and took part as one of the speakers. The State Board of Agriculture became interested enough in the achievement to send its secretary and also to advance enough money to finance the Western Wyoming State Poultry Show, to be held in connection with the round-up.² Twelve of the winning birds from this show were sent to the Wyoming State Fair, and, besides taking sweepstakes, they were awarded nineteen ribbons.

The fourth, fifth, and sixth round-ups were increasingly popular and successful. State potato and grain shows have been added. The

¹ Now the Lyman Lions Club.

² This poultry show is now held annually.

people look forward with eager anticipation to the round-up. They attend with the feeling that they are going to get something that will be really worth while. The suggestions given at these conferences are followed by evening and extension classes in the high-school building. The State Extension Department furnishes specialists to assist with this instruction. Classes in home economics, agriculture, and poultry husbandry have been conducted.

The high school has become the community center. The people look to it for help in the solution of their problems as well as for help in their social activities. The correlation of education with community life has developed a spirit of unity and has rejuvenated the social and industrial life of the whole region.

Educational Writings

REVIEWS AND BOOK NOTES

A study of the duties of teachers.—For a number of years institutions devoted to the training of teachers have been advising students to teach only that which functions in experience. At the same time they have been oblivious of this injunction in the conduct of their own curriculums. Teacher-training institutions have been marking time while technical, library, nursing, and pharmacy schools have been analyzing their respective professions to discover the specific abilities and traits which it is their business to develop. Professor Charters, the protagonist of these enterprises, now presents, in collaboration with Professor Waples, an analysis¹ of the work of the teacher, the raw material for the construction of functional curriculum for the training of teachers.

The authors present an extraordinarily ordered and thorough treatment of a colossal amount and variety of data, only a portion of which could be included in the book. One is amazed at the extent of the co-operation attained in this study. It is doubtful whether any other agency could have enlisted the aid of as many and as varied groups of persons engaged in teaching. The reviewer has never encountered a more honest document. The authors evade no issues, conceal no weaknesses, and fearlessly expose every step to the severest critic.

Only the analyst interested in the details of the technique will follow the account of the method through its chain of intricate steps although these steps are presented with crystalline clearness. The book is broken up into five logical parts: (1) the discovery of the traits of good teachers, (2) the discovery of the activities of teachers, (3) the evaluation of teachers' activities, (4) the application of the data to the reconstruction of teacher-training curriculums, and (5) a tabular arrangement of the data.

To discover the traits of good teachers, ninety-seven parents, teachers, pupils, supervisors, superintendents, and professors of education were interviewed; they contributed 2,800 trait-actions. These trait-actions were classified under eighty-three traits. Traits similar in meaning were combined or telescoped to make a list of twenty-five. These were evaluated by twenty-five administrators and twenty-five teachers. In order to construct a master-list of the activities of teachers, the authors assembled all lists prepared by other investigators, ac-

¹ W. W. Charters and Douglas Waples, *The Commonwealth Teacher-Training Study*. Chicago: University of Chicago Press, 1929. Pp. xx+666. \$4.00.

cumulating six thousand activities in this way. Six thousand and fifty-four teachers filled out blanks in the summer of 1925, yielding 211,890 activities. For the purpose of making an experimental classification, the investigators worked with 150 blanks containing 5,250 duties. Before the final classification was determined, additional activities were obtained from experienced teachers to the number of twelve thousand. The final classification includes seven divisions: (1) activities involved in classroom instruction, (2) activities involved in school and class management, (3) activities involved in supervision of pupils' extra-classroom activities, (4) activities involving relations with personnel of school staff, (5) activities involving relations with members of school community, (6) activities concerned with professional and personal advancement, and (7) activities in connection with school plant and supplies. The activities under each of these divisions were classified into subdivisions, sections, and subsections. The subsection, to which the authors refer as a "type-activity," is the smallest unit in the analysis.

When the classification of the twelve thousand activities was completed, 2,331 teachers were asked to check it for completeness, but no new type-activities were added. Books, articles, and returns from twenty-five professors of education yielded no new type-activities. However, 1,450 smaller subdivisions were added in the form of so-called "activity paragraphs," which were elaborations of the type-activities. These are given in the *full* list of activities only as contrasted with the shorter list known as the "check-list," or "master-list," of activities.

The next step consisted in evaluating the master-list of activities for (1) frequency of occurrence, (2) relative importance, (3) relative difficulty, and (4) value of preservice training. This step was carried out by at least twenty-five persons from the following groups: city teachers; rural teachers; primary, intermediate, junior high school, and senior high school teachers; experimental-school teachers; supervisors; principals; and instructors in education. The summary tables give the decile rank of each activity on the basis of the criteria for the various groups in the teaching service.

The authors or their associates made practical applications of their data to the variety of needs of a teacher-training institution in order to demonstrate the usefulness of their material. Consequently, illustrations are offered of the use of the activity-list in the construction of courses in observation and practice, methods of teaching, professionalized subject matter, educational psychology, classroom management, principles of education, and educational administration.

The tabular material includes a list of teachers' traits and trait-actions; a full list of teachers' activities; and summary tables of the curricular values, expressed in decile ranks, of teachers' activities as judged by various professional groups.

The problem of classification was enormous, and no one can deny that the authors took pains to arrive at the most satisfactory system. However, one

wonders whether the lack of proper emphasis on Division I, "Teachers' Activities Involved in Classroom Instruction," and Division II, "Teachers' Activities Involved in School and Class Management," is not a weakness of the system of classification. The authors admit that the analysis was carried far enough except perhaps in Divisions I and II. Since these two divisions make up the bulk of the duties of teaching, they should have been elaborated in proportion to their importance. This belief is borne out by the low rank, in general, assigned to activities in Divisions III-VII. The authors' defense notwithstanding, the first two divisions could have been subdivided even if the subdivisions were not comparable with other subdivisions. Under Division I "Teaching Subject Matter" and "Teaching Pupils To Study" are parallel subdivisions. The reviewer is inclined to believe that the former could have been subdivided under headings that are more nearly co-ordinate with the latter heading.

The main difficulty is the authors' dissection of the teaching process into portions that do not have unity or completeness. To illustrate: for all practical purposes, collecting, filing, issuing, sending, signing, and posting records are part of one simple act, namely, keeping records. A unit of activity such as "marking" does not occur as such in the master-list. Instead, "Marks" is a subheading under "Collecting data about," "Tabulating data about," "Searching for records and reports about," "Making out records and reports about," "Using records and reports about," "Keeping records and reports about," etc. The activity "marking," which is readily distinguishable from many other school activities, is mutilated beyond recognition. The fairly uniform response to all the type-activities in some of the subsections suggests that the abstract fractional parts do not have much significance as units of actual teaching.

However, the reviewer confesses that, as he proceeded with the examination of the full list of activities, the activities began to have more meaning. The activity paragraphs, which are included in the full list, elaborate the apparently artificial type-activities and have the effect of giving body and meaning to them. In the opinion of the reviewer, the full list is, on the whole, more valuable for practical use than is the check-list. So much of the discussion is in terms of the check-list or master-list and the statistical treatment thereof that one is likely to overlook the full list, which is the more useful and more meaningful, especially since it requires only twenty-five persons to make the evaluations.

The investigators were under no obligation to study what ought to be done by teachers, but the reviewer cannot agree with their argument that they have determined the duties that teachers ought to perform. The activities obtained from the more progressive groups were dwarfed by the great mass obtained from those devoted to the *status quo*. Any method of adding or checking activities within the limits of the previously prepared check-list would not result in any marked deviation from present practice. Progressive teaching activities can be obtained only by studying progressive teachers exclusively within a smaller compass and by a more subtle technique. However, teacher-training institutions, no matter how advanced, have much to learn from the book.

The study will undoubtedly modify the character of teaching-training in the United States. The book contains the raw material for an infinite number of useful research projects. It is rich in usable material for every person engaged in teacher-training, no matter what his work may be. The danger is that the timid instructor may be so awed by the formidable array of lists and tables that he will be unable to take advantage of the abundant help it offers. The authors have anticipated this and have clearly and carefully set forth ways in which their materials may be used in reconstructing every kind of course in teacher-training institutions.

HENRY HARAP

SCHOOL OF EDUCATION, WESTERN RESERVE UNIVERSITY

Research in the field of secondary-school administration.—During the past two years there has been increased interest in research in secondary education. Secondary-school administrators are aware of the fact that, with the tremendous increase in the secondary-school enrolment and the changed conception of the functions of the secondary school, administrative reorganization, curriculum revision, and changes in plans and procedures must be based on scientific investigations.

The difficulty with much of the educational research done in the universities is that the findings are not given wide distribution. If the investigations are to influence present practice, to stimulate those working in the field to try out plans along the lines suggested by the investigators, or to extend the original investigations, the results must be made available to the profession at large. Professors Reavis and Butsch have rendered a distinct service in making available in abstract form² some of the Masters' theses in the field of secondary education completed at the University of Chicago during the years 1927 and 1928. By publishing the abstracts as a bulletin, the Department of Secondary-School Principals of the National Education Association has made the findings of this group of dissertations generally available to those working in the secondary-school field. This is in line with the established policy of the principals' organization and is certain to meet with favor.

From time to time other agencies have published annotated lists of unpublished theses. Among these lists, the one compiled by the National Committee on Research in Secondary Education and published by the Bureau of Education is outstanding. The work started by this committee has been taken over by the Bureau of Education, and lists covering the whole field of education are now published periodically. Because of the scope of these lists, it is possible to give only a very brief digest of each study. The abstracts prepared by Pro-

² William C. Reavis and Russell L. C. Butsch. *Abstracts of Unpublished Masters' Theses in the Field of Secondary-School Administration*. Bulletin Number 24 of the Department of Secondary-School Principals of the National Education Association. Cicero, Illinois: H. V. Church, 1929. Pp. 202.

ffers Reavis and Butsch are of outstanding merit because they are extended enough to indicate to practical school men the results of each study. On the other hand, those interested in making studies along similar lines or extending these studies can readily determine the extent to which the studies may be utilized in further research.

Abstracts of fifty-seven studies are presented by Professors Reavis and Butsch. These studies are classified under the following headings: "Principals and Their Duties," "Boards of Education," "Administration of the Teaching Staff," "Problem Pupils," "Comparison of Groups of Secondary-School Pupils," "Examinations," "Use of Tests in Prediction and Classification," "Correlation of Physical and Mental Factors," "Effect of Extra-Class Activities on School Marks," "Publications," "Reading of Secondary-School Pupils," "Physical Education and Athletics," "Experiments with Mastery Technique," "Evolution of Junior High School Organization," "Articulation of Senior High Schools and Junior Colleges," "Historical and Survey Studies," and "Miscellaneous Studies."

Many valuable research studies are available only in typewritten form in the libraries of the institutions where they were made. It is to be hoped that the abstracts prepared by Professors Reavis and Butsch will stimulate those working in the field of secondary education in other institutions to make the work of their graduate students available in similar fashion.

WILLIAM H. BRISTOW

PENNSYLVANIA STATE DEPARTMENT OF PUBLIC INSTRUCTION

A revised textbook in high-school physics.—In a revised and enlarged edition¹ of his book *The Essentials of Modern Physics*, Charles E. Dull has placed before the pupils and teachers of elementary physics some very appealing material. The new book contains 250 pages more than does the earlier one.

The organization of the material follows the usual sequence: mechanics, heat, sound, light, magnetism, and electricity. These subjects are discussed in twenty-nine chapters.

Those who believe that the organization of the subject matter of physics into a small number of "units of instruction" is desirable may take issue with the author's organization. By his plan the subject of heat, for example, is treated in four separate chapters, as is the subject of light. The subject of electricity is discussed in six chapters. Those who favor the breaking-up of the subject matter into a number of teaching topics will find the treatment very satisfactory.

The book is decidedly readable; the language is simple; the explanations are clear and ample; the illustrative material is selected from the experiences of the pupil. The pupil who uses the textbook will be impressed with the real-

¹ Charles E. Dull, *Modern Physics*. New York: Henry Holt & Co., 1929 (revised). Pp. viii+778.

ness of the subject. The problems and the questions used as test material are real rather than of the "stunt" variety.

Several features of the book are worthy of mention. At the beginning of each chapter is a vocabulary in which the new words to be encountered are listed and defined. At the end of each chapter is a brief summary of the material discussed in the chapter. The questions at the ends of the sections are divided into two groups, namely, questions of the thought-provoking type requiring no mathematical manipulation for their answer and problems which involve mathematical processes. There are three appendixes. Appendix A presents additional problems, arranged by chapters to correspond to the chapters of the text. Appendix B is a summary of the formulas commonly used in elementary physics. These formulas are given for the convenience of the teachers who prefer the use of the formula for the solution of problems to the straight analytical method. In Appendix C are a number of tables of useful physical constants.

The book is strictly modern. It contains a well-written chapter on radio, television, and atomic disintegration. The final chapter, which deals with the automobile, may be used as a means of acquainting the pupil with the automobile, but it is written in such a way as to serve as a very effective review of the entire field of physics.

The illustrations are especially attractive. They are numerous and interesting and are exceptionally well chosen to show the practical applications of physical principles in commercial and industrial life. The physical features of the book are excellent and add much to the strong appeal the book makes as a textbook for elementary physics classes.

There are no quantitative laboratory exercises as such included in the book. The author has, however, prepared a separate book of seventy-seven such exercises which may be used with the textbook.

VERGIL C. LOHR

A handbook of athletics for use in secondary schools.—Most of the books on athletics have been written for the coach who is a specialist in one particular branch of athletics. As a result, a single book usually covers in considerable detail the various techniques and practices in a given branch of athletics. Such treatments may be of great value to the specialist in athletic coaching; they are, however, used but little by the coach in the average high school, who must usually coach three or more branches of athletics besides doing considerable teaching.

Graham Bickley, of the University of Illinois, has prepared a book¹ covering the four major sports in the high school. He states in the Preface that the treatment "is an effort to put into the hands of high-school coaches and players such information about the fine points of football, baseball, basket-ball, and track as will enable them to coach or play the above-mentioned games with intelligence" (p. vi).

¹ Graham Bickley, *Handbook of Athletics for Coaches and Players*. New York: A. S. Barnes & Co., 1929. Pp. xii+152. \$1.80.

The amount of space devoted to the different sports is in proportion to their relative importance in the average high school. Seventeen pages are devoted to track; twenty-nine pages to basket-ball; thirty-three pages to baseball, and sixty-one pages to football.

In covering such a broad field in 150 pages, the author was compelled to treat the various topics briefly. Long explanations are omitted. Many coaches may criticize the methods suggested in teaching a given game or athletic event. The author anticipates such criticism in the Preface:

By no means are the methods in this book set forth as the only ones by which any particular thing may be done. There are other ways, to be sure, but it is believed that the suggestions in this book are sound and worth while and that they will give to the coach and the player a foundation upon which to build [p. vi].

The conciseness and the organization of the material make the book represent very well the essential material in lectures or instruction given by authoritative specialists in the different sports. The main topics have well-chosen subtopics, and these in turn cover material clearly and concisely presented. The terminology is in no way technical; it should be readily understood by all, even the high-school athlete.

The author is a firm believer in teaching the fundamentals and should be commended for his treatment of the essential material in the different sports. For example, the topics treated in the section on football are as follows: "The Uniform," "Tackling and Blocking," "The Fundamentals of Kicking," "The Forward Pass," "Defensive Line Play," "Offensive Line Play," "Defense," "Offense," "The Kick-off," "A Bit of First Aid," and "Miscellaneous."

In presenting material on basket-ball and football, any book must give some space to plays and formations. The author gives a good assortment. The formations are clearly drawn and explained. There are no illustrations for track, and there is only a limited number for baseball.

The book can be recommended for high-school libraries, for coaches, and for others interested in concise material on the major sports.

GALVIN L. WALKER

Problems of commercial education in secondary schools.—*Commercial Education in Secondary Schools*¹ is an illustration of co-operation among workers in two technical fields, education and commerce. The editor is a professor of education; the contributors are specialists in education, business, or commerce.

The content of the book is presented in eighteen chapters: "Problems of Secondary Commercial Education," "Building the Commercial Curriculum," "Advertising," "Bookkeeping and Accounting," "Business Arithmetic," "Business English," "Business Law," "Business Organization and Operation," "Exploratory Courses in Commerce," "Geography in Commercial Education," "Re-

¹ *Commercial Education in Secondary Schools.* Edited by Harry D. Kitson. Boston: Ginn & Co., 1929. Pp. viii+374. \$2.20.

tail Selling," "Salesmanship," "Secretarial Studies," "Shorthand," "The Social Studies in the Commercial Curriculum," "Typewriting," "Testing in Commercial Education," and "Extra-curricular Activities in Commercial Education." These chapter titles show that the field of commercial education has been fully covered.

The purpose of the book, as stated in the Preface, is "to record the steps that the secondary schools are taking to emancipate themselves from the possessions and traditions of the old order and lay out the lines along which they can develop a type of commercial education that will meet the needs of modern business" (p. v). By the "old order" is understood the type of commercial education that was common in business colleges about thirty years ago. At first the secondary schools followed this old order entirely. It was not long, however, until it was evident to those engaged in commercial education in secondary schools that the type of commercial education used in the business college was not suitable for the public secondary school. The book traces the changes that have taken place from the time the old order was introduced to the present.

Several questions arise when an attempt is made to "lay out the lines along which [secondary schools] can develop a type of commercial education that will meet the needs of modern business." Is such training a proper function of secondary education? If it is, will the needs be met by the addition of more commercial courses? Shall the commercial courses be taught as mere techniques? Or is modern business also a great evolving social institution? The way in which these questions are answered depends on one's point of view not only toward commercial education but toward the science of education. Commercial education is making attempts to establish itself on a scientific basis, but much remains to be done. The authors of the book are aware of the problem.

The chapters dealing with the commercial subjects are organized very much alike. Among the topics included in each chapter are the following: the historical background, the development of early courses, the development of methods of teaching, the administration of the courses, the place and length of particular courses, why the subject is taught, the training of teachers, textbooks, and tests.

The book is a valuable addition to the present literature in commercial education. It should be of value not only to students, teachers, and supervisors of commercial education but also to administrators of secondary schools. It is an excellent presentation of commercial education in secondary schools.

W. W. MEYER

COMMUNITY HIGH SCHOOL, HARVARD, ILLINOIS

Practical fruit-growing enterprises.—In a handbook entitled *Fruit-Growing Projects*¹ Fred C. Sears has gathered the essential details of growing some of our

¹ Fred C. Sears, *Fruit-Growing Projects*. New York: Macmillan Co., 1928. Pp. xxiv + 384.

profitable fruits. The fruits discussed are those most commonly grown for sale; citrus fruits are omitted.

The book is the fourth in the Macmillan Agricultural Project Series for students of vocational agriculture, edited by Rufus W. Stimson. Professor Sears, the author, is a successful fruit-grower with a background both scientific and practical.

The first three chapters, one-half of the book, discuss apple-growing in all its phases. Chapters on the growing of pears, peaches, strawberries, raspberries, and grapes follow. Chapters on selecting a fruit farm and on financing, laying out, and organizing such a farm are included.

The book contains an index and references to other textbooks; it is also profusely illustrated. Throughout the book the author lets the reader know what he himself would do at certain times and under given conditions. At every point, however, he challenges the reader to agree or disagree and in any event to consult other authorities, including the best local fruit-growers, before he goes ahead. Many of the questions, which are suggested but not always answered, are designed to lead the reader to think for himself.

The editor states that the handbook is primarily for Smith-Hughes classes and unit courses in vocational agriculture but should be of direct help to all earnest and progressive fruit-growers and to all who train teachers of agriculture. The author claims that the book is for students of vocational agriculture, especially those who may select as projects the growing of some of our fruits.

REID M. BROOKS

A textbook in first-year Spanish.—“To combine a thorough study of grammatical principles in Spanish with certain effective principles of the direct method” is the objective of a recent book¹ which makes use of every effort to train the pupil “as far as possible to think in the foreign language and to start him on the road to a speaking and reading knowledge” (p. v).

The book includes a carefully worked-out introduction on Spanish pronunciation, designed to meet the needs of both Castilian and South American Spanish, and a list of classroom expressions and grammatical terms. The main body of the text consists of eighty lessons, which follow largely the time-worn path of grammatical presentation. First, a practical vocabulary to be memorized is presented. This is followed by a clear and concise statement of grammatical principles and by paradigms to be memorized. Minor points, necessary for completeness in this type of textbook, are inserted in footnotes. Longer topics, complex in themselves, are divided into several lessons. The exercises in Spanish for the first thirty lessons deal with school and home life; those for the remaining lessons, with the incidents of a summer trip to Spain. The exercises are arranged in narrative form. The drill material, which is most ample, is based on the exercises. Every tenth lesson provides a review of the preceding nine lessons. As the work progresses, it will become necessary to shorten the

¹ William E. Knickerbocker, *A First Course in Spanish*. New York: D. Appleton & Co., 1928. Pp. xxx+304+56. \$1.76.

lessons for many classes because of the increasing amount of technical material. In order not to defeat the original purpose—to provide constant drill and repetition—the lessons may be divided into units of more convenient length.

The objective is obviously to train by the grammar method, which has been carefully worked out with explicit explanations that can leave no doubt in the pupil's mind. For example, the explanation of the development of *conmigo*, *contigo*, etc., from the Latin forms *mēcum*, *tēcum*, etc., is adequate and satisfactory. The use of the clock device in telling time is effective. The nomenclature of the tenses, however, needs simplification. Experience with children shows that the Spanish terms *pretérito indefinido* (past absolute), *pretérito pluscuamperfecto* (pluperfect indicative), and *condicional imperfecto* (present conditional) are hopelessly confusing.

The physical makeup of the book leaves nothing to be desired. There are few typographical errors; the print is large and clear; the paradigms are in bold-face type. The illustrations are clever and stimulate interest. The concluding sections contain a well-chosen list of proverbs, a useful summary of rules, and excellent appendixes for the study of verb forms.

As to the usability of this type of book, there arises the moot question of objectives. For children at the junior high school level there is too much harking-back to the old drill method. Moreover, where reading is the primary objective, with vocabulary and usage developed functionally, this method cannot be employed. However, those wishing to use the old approach in newer and fresher guise and those desiring to give a clear-cut review or presentation of grammar *per se* may use this type of material with profit and advantage.

MARY W. DILLINGHAM

Is there need of another Latin grammar?—A new Latin grammar¹ has appeared. The question immediately arises: Why? Any publication of this type must justify itself, and from that point of view the reviewer has examined the book.

The author thinks that the question is pertinent, for the Preface is almost wholly devoted to such justification, and reference is made to a separate pamphlet which the author has published entitled *Is There Need of Another Latin Grammar?* It is the author's belief that Latin has been "made unnecessarily difficult at every turn" (p. v). He aims to "eliminate altogether many of these difficulties, to simplify and clarify others, and to correct the numerous and serious violations of fundamental principles of pedagogy" (p. v). He further says that "glaring errors and contradictions and inconsistencies of every description have drifted down from grammar to grammar" (p. v) and that his "method of presentation . . . will save for the student a vast amount of time and energy—a saving . . . in some cases of as much as 75 per cent" (p. v). He then gives illustrations of what he means by each of the points mentioned.

¹ Herbert Charles Elmer, *Latin Grammar*. New York: Macmillan Co., 1928. Pp. xx+328.

These statements from the Preface challenge comparison of the book with existing grammars. Such comparison has been made, first, with Hale and Buck's *Latin Grammar* because that book was not a restatement but a re-writing of Latin grammar, which Professor Elmer quite ignores, and, second, with Bennett's *Latin Grammar* because a second grammar coming from Cornell University is naturally compared with the earlier one produced there. The authors of both these older books will be promptly exonerated of errors of misstatement or inaccuracy of statement within the limits of their intentions. A consideration of grammatical opinion is quite another matter. With the exception of one point, which will be discussed later, the three books are so arranged and presented that "fundamental principles of pedagogy" seem to have fared equally well in all three. The problem of time-saving cannot, of course, be argued on the basis of the number of pages of text for often a discussion of several pages leaves one with clear ideas in less time than does a far more succinct statement. Nevertheless, the raising of the question tempts one to make a comparison for mere bulk. The results may be presented as follows:

	Elmer	Hale and Buck	Bennett
Phonology.....	7	26	8
Inflection.....	97	94	97
Uninflected particles.....	0	0	3
Word formation.....	7	11	8
Syntax.....	138	212	123
Prosody.....	9	9	7
Hidden quantity.....	4	2	0
Appendices.....	33	16	8
Index.....	29	18	26
Total number of pages..	324	388	280

The comparison shows that Professor Elmer's book stands midway between the Bennett and the Hale and Buck grammars in number of pages.

This leaves for consideration Professor Elmer's work on simplification and clarification; he claims that he has corrected violations of pedagogy as well. He particularly cites his lists of Latin words taking the dative, for example, instead of general English lists, of which Professor Bennett is guilty, and his statement for the dative with compound verbs, which is more explicit than Professor Hale's although the latter is perfectly comprehensible. This particular phase of Professor Elmer's justification raises the whole question of the use of a grammar in American schools. It seems to be his assumption that the grammar is used for memorizing such rules as those cited. The fact is that in the West certainly and in the East largely it has no such use. That function has long been relegated to the beginner's book, which has been produced in great numbers. The grammar is now a reference book, which supplements the beginner's book at higher levels. The desirable thing in a grammar, then, is not memory-saving devices but completeness and accessibility of information. On the former score Professor Elmer's book is inferior to that of Professors Hale and

Buck. On the latter it has no advantage. On the basis of his own claims, then, Professor Elmer's book does not seem to the reviewer to be justified.

This does not mean that there is no justification for further publication by the specialist in syntax. Syntax is not a field of research that has been exhausted by any means. In this very book Professor Elmer has given some valuable results of his own work, notably in the treatment of the potential subjunctive, of the constructions with *interest* and *rēfert*, and of the accusative case. That type of thing is far more valuable than the things that are emphasized in the Preface. The place for that type of presentation, however, is not in a grammar of this kind but in separate brochures with fuller discussion and presentation of evidence.

Though it has been said at length that this is a book that is not needed, the reviewer grants its soundness, barring the inclusion of athematic *ferō* with *dicō*, *dūcō*, and *faciō* in listing irregularities of imperatives, and commends it for its simplicity and accuracy of statement.

MIMA MAXEY

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

ACHESON, EDNA LUCILE. *The Construction of Junior Church School Curricula*. Teachers College Contributions to Education, No. 331. New York: Teachers College, Columbia University, 1929. Pp. viii+186. \$1.75.

Activities of the Principal. Edited by Arthur S. Gist. Eighth Yearbook of the Department of Elementary School Principals. Washington: Department of Elementary School Principals of the National Education Association, 1929. Pp. 132-528. \$2.00.

COCKS, A. W. *The Pedagogical Value of the True-False Examination*. University Research Monographs, Number 7. Baltimore: Warwick & York, Inc., 1929. Pp. x+132. \$2.60.

The College Teacher: Addresses and Proceedings of the Fifteenth Annual Meeting of the Association of American Colleges. Edited by Robert L. Kelly. Association of American Colleges Bulletin, Volume XV, Number 1. Lancaster, Pennsylvania: Association of American Colleges, 1929. Pp. 220.

COLVIN, STEPHEN S., and BAGLEY, WILLIAM C. *Human Behavior*. Revised by William C. Bagley with the co-operation of Marion E. Macdonald. New York: Macmillan Co., 1929. Pp. xii+334. \$1.60.

CRAWFORD, CLAUDE C., and McDONALD, LOIS P. *Modern Methods in Teaching Geography*. Boston: Houghton Mifflin Co., 1929. Pp. xii+306. \$1.90.

DUDLEY, L. LELAND. *The Location of City School Plants*. Harvard Bulletins in Education, Number 14. Cambridge, Massachusetts: Harvard University Press, 1929. Pp. viii+130. \$1.00.

FRASIER, GEORGE WILLARD, and OTHERS. *Experiments in Teachers College Administration*. Baltimore: Warwick & York, Inc., 1929. Pp. 80. \$1.88.

GALTER, ISRAEL. *Improving the Spoken Vocabulary of Elementary School Children*. Philadelphia: Temple University, 1928. Pp. 96.

HORN, JOHN LOUIS. *Principles of Elementary Education*. New York: Century Co., 1929. Pp. xii+394. \$2.00.

JAGGER, J. HUBERT. *The Sentence Method of Teaching Reading*. London, England: Grant Educational Co., Ltd., 1929. Pp. 120.

MCGUFFEY, VERNE. *Differences in the Activities of Teachers in Rural One-Teacher Schools and of Grade Teachers in Cities*. Teachers College Contributions to Education, No. 346. New York: Teachers College, Columbia University, 1929. Pp. vi+66.

MEYER, HAROLD D., and EDDLEMAN, SAMUEL MCKEE. *Financing Extra Curricular Activities*. New York: A. S. Barnes & Co., 1929. Pp. xii+132. \$1.00.

MORRIS, ELIZABETH HUNT. *Personal Traits and Success in Teaching*. Teachers College Contributions to Education, No. 342. New York: Teachers College, Columbia University, 1929. Pp. 76. \$1.50.

MORRIS, JOHN T. *Considerations in Establishing a Junior College*. Teachers College Contributions to Education, No. 343. New York: Teachers College, Columbia University, 1929. Pp. 64. \$1.50.

NYQUIST, FREDRIK VICKSTRÖM. *Art Education in Elementary Schools*. University Research Monographs, Number 8. Baltimore: Warwick & York, Inc., 1929. Pp. 160. \$2.08.

PURDOM, T. LUTHER. *The Value of Homogeneous Grouping*. University Research Monographs, Number 1. Baltimore: Warwick & York, Inc., 1929. Pp. 100. \$2.08.

ROSENLOF, GEORGE WALTER. *Library Facilities of Teacher-Training Institutions*. Teachers College Contributions to Education, No. 347. New York: Teachers College, Columbia University, 1929. Pp. vi+160.

School Building Survey, 1927: A Survey of the Public School Buildings in the State of New Jersey. Trenton, New Jersey: State Department of Public Instruction, 1928. Pp. 254.

VAN WAGENEN, M. J. *Comparative Pupil Achievement in Rural, Town, and City Schools*. Minneapolis, Minnesota: University of Minnesota Press, 1929. Pp. x+144. \$1.50.

WHITEHOUSE, J. HOWARD. *Creative Education at an English School*. London, England: Cambridge University Press, 1928. Pp. xii+168. \$6.40.

WRIGHT, J. C., and ALLEN, CHARLES R. *Efficiency in Education*. New York: John Wiley & Sons, Inc., 1929. Pp. xvi+406. \$3.00.

BOOKS PRIMARILY FOR HIGH-SCHOOL TEACHERS AND PUPILS

AZA, VITAL. *Ciencias exactas*. With introduction, notes, and vocabulary by Margie Burks and Federico Ruiz Morcuende. Chicago: Benj. H. Sanborn & Co., 1929. Pp. xxxvi+138. \$1.12.

CONNISTON, RUTH MUZZY. *Chansons un peu: A Collection of French Songs*,

with Games, Dances, and Costumes, Grammar Drill and Vocabulary. Garden City, New York: Doubleday, Doran & Co., Inc., 1929. Pp. xvi+148. \$2.00.

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